Aerobus

v1.2

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Chapter 4

Concept Documentation

4.1 aerobus::IsEuclideanDomain Concept Reference

Concept to express R is an euclidean domain.

`#include <aerobus.h>`

4.1.1 Concept definition

```
template<typename R>
concept aerobus::IsEuclideanDomain =  IsRing<R> && requires {
        typename R::template div_t<typename R::one, typename R::one>;
        typename R::template mod_t<typename R::one, typename R::one>;
        typename R::template gcd_t<typename R::one, typename R::one>;
        typename R::template eq_t<typename R::one, typename R::one>;
        typename R::template pos_t<typename R::one>;

        R::template pos_v<typename R::one> == true;

        R::is_euclidean_domain == true;
    }
```

4.1.2 Detailed Description

Concept to express R is an euclidean domain.

4.2 aerobus::IsField Concept Reference

Concept to express R is a field.

`#include <aerobus.h>`

4.2.1 Concept definition

```
template<typename R>
concept aerobus::IsField =  IsEuclideanDomain<R> && requires {
        R::is_field == true;
    }
```

4.2.2 Detailed Description

Concept to express R is a field.

4.3 aerobus::IsRing Concept Reference

Concept to express R is a Ring (ordered)

`#include <aerobus.h>`

4.3.1 Concept definition

```
template<typename R>
concept aerobus::IsRing =  requires {
        typename R::one;
        typename R::zero;
        typename R::template add_t<typename R::one, typename R::one>;
        typename R::template sub_t<typename R::one, typename R::one>;
        typename R::template mul_t<typename R::one, typename R::one>;
    }
```

4.3.2 Detailed Description

Concept to express R is a Ring (ordered)

Chapter 5

Class Documentation

5.1 aerobus::polynomial< Ring >::val< coeffN >::coeff_at< index, E > Struct Template Reference

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.2 aerobus::polynomial< Ring >::val< coeffN >::coeff_at< index, std::enable_if_t<(index< 0||index > 0)> > Struct Template Reference

Public Types

- using **type** = typename Ring::zero

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.3 aerobus::polynomial< Ring >::val< coeffN >::coeff_at< index, std::enable_if_t<(index==0)> > Struct Template Reference

Public Types

- using **type** = aN

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.4 aerobus::ContinuedFraction< values > Struct Template Reference

represents a continued fraction a0 + 1/(a1 + 1/(...))

`#include <aerobus.h>`

5.4.1 Detailed Description

template<int64_t... values>
struct aerobus::ContinuedFraction< values >

represents a continued fraction a0 + 1/(a1 + 1/(...))

Template Parameters

...values	are aerobus::i64

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.5 aerobus::ContinuedFraction< a0 > Struct Template Reference

Specialization for only one coefficient, technically just 'a0'.

`#include <aerobus.h>`

Public Types

- using **type** = typename q64::template inject_constant_t< a0 >

Static Public Attributes

- static constexpr double **val** = type::template get<double>()

5.5.1 Detailed Description

template<int64_t a0>
struct aerobus::ContinuedFraction< a0 >

Specialization for only one coefficient, technically just 'a0'.

Template Parameters

a0	an integer (aerobus::i64)

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.6 aerobus::ContinuedFraction< a0, rest... > Struct Template Reference

specialization for multiple coefficients (strictly more than one)

`#include <aerobus.h>`

Public Types

- using **type** = q64::template add_t< typename q64::template inject_constant_t< a0 >, typename q64::template div_t< typename q64::one, typename ContinuedFraction< rest... >::type > >

Static Public Attributes

- static constexpr double **val** = type::template get<double>()

5.6.1 Detailed Description

template<int64_t a0, int64_t... rest>
struct aerobus::ContinuedFraction< a0, rest... >

specialization for multiple coefficients (strictly more than one)

Template Parameters

a0	an integer (aerobus::i64)
...rest	integers (aerobus::i64)

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.7 aerobus::i32 Struct Reference

32 bits signed integers, seen as a algebraic ring with related operations

`#include <aerobus.h>`

Classes

- struct val

  values in i32, again represented as types

Public Types

- using **inner_type** = int32_t
- using **zero** = val< 0 >

  constant zero
- using **one** = val< 1 >

  constant one
- template<auto x>
  using **inject_constant_t** = val< static_cast< int32_t >(x)>
- template<typename v >
  using **inject_ring_t** = v
- template<typename v1 , typename v2 >
  using **add_t** = typename add< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **sub_t** = typename sub< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **mul_t** = typename mul< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **div_t** = typename div< v1, v2 >::type
- template<typename v1 , typename v2 >
  using mod_t = typename remainder< v1, v2 >::type

  modulus operator yields v1 % v2 for example : i32::mod_t<i32::val<7>, i32::val<2>>
- template<typename v1 , typename v2 >
  using **gt_t** = typename gt< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **lt_t** = typename lt< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **eq_t** = typename eq< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **gcd_t** = gcd_t< i32, v1, v2 >
- template<typename v >
  using **pos_t** = typename pos< v >::type

Static Public Attributes

- static constexpr bool **is_field** = false

  integers are not a field
- static constexpr bool **is_euclidean_domain** = true

  integers are an euclidean domain
- template<typename v1 , typename v2 >
  static constexpr bool **eq_v** = eq_t<v1, v2>::value
- template<typename v >
  static constexpr bool **pos_v** = pos_t<v>::value

5.7.1 Detailed Description

32 bits signed integers, seen as a algebraic ring with related operations

5.7.2 Member Typedef Documentation

5.7.2.1 mod_t

```
template<typename v1 , typename v2 >
using aerobus::i32::mod_t = typename remainder<v1, v2>::type
```

modulus operator yields v1 % v2 for example : i32::mod_t<i32::val<7>, i32::val<2>>

Template Parameters

v1	a value in i32
v2	a value in i32

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.8 aerobus::i64 Struct Reference

64 bits signed integers, seen as a algebraic ring with related operations

```
#include <aerobus.h>
```

Classes

- struct val

  values in i64

Public Types

- using **inner_type** = int64_t

  type for actual values
- template<auto x>
  using **inject_constant_t** = val< static_cast< int64_t >(x)>
- template<typename v >
  using inject_ring_t = v

  injects a value used for internal consistency and quotient rings implementations for example i64::inject_ring_t<i64::val<1>> -> i64::val<1>
- using **zero** = val< 0 >

  constant zero
- using **one** = val< 1 >

  constant one
- template<typename v1 , typename v2 >
  using **add_t** = typename add< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **sub_t** = typename sub< v1, v2 >::type

- template<typename v1 , typename v2 >
  using **mul_t** = typename mul< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **div_t** = typename div< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **mod_t** = typename remainder< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **gt_t** = typename gt< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **lt_t** = typename lt< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **eq_t** = typename eq< v1, v2 >::type
- template<typename v1 , typename v2 >
  using **gcd_t** = gcd_t< i64, v1, v2 >
- template<typename v >
  using **pos_t** = typename pos< v >::type

Static Public Attributes

- static constexpr bool **is_field** = false

  integers are not a field
- static constexpr bool **is_euclidean_domain** = true

  integers are an euclidean domain
- template<typename v1 , typename v2 >
  static constexpr bool gt_v = gt_t<v1, v2>::value

  strictly greater operator yields v1 > v2 as boolean value
- template<typename v1 , typename v2 >
  static constexpr bool **lt_v** = lt_t<v1, v2>::value
- template<typename v1 , typename v2 >
  static constexpr bool **eq_v** = eq_t<v1, v2>::value
- template<typename v >
  static constexpr bool **pos_v** = pos_t<v>::value

5.8.1 Detailed Description

64 bits signed integers, seen as a algebraic ring with related operations

5.8.2 Member Typedef Documentation

5.8.2.1 inject_ring_t

```
template<typename v >
using aerobus::i64::inject_ring_t = v
```

injects a value used for internal consistency and quotient rings implementations for example i64::inject_ring_t<i64::val<1>> -> i64::val<1>

Template Parameters

v	a value in i64

5.8.3 Member Data Documentation

5.8.3.1 gt_v

```
template<typename v1 , typename v2 >
constexpr bool aerobus::i64::gt_v = gt_t<v1, v2>::value  [static], [constexpr]
```

strictly greater operator yields v1 > v2 as boolean value

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.9 aerobus::is_prime< n > Struct Template Reference

checks if n is prime

```
#include <aerobus.h>
```

Static Public Attributes

- static constexpr bool **value** = internal::_is_prime<n, 5>::value

  true iff n is prime

5.9.1 Detailed Description

template<size_t n>
struct aerobus::is_prime< n >

checks if n is prime

Template Parameters

n	

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.10 aerobus::polynomial< Ring > Struct Template Reference

`#include <aerobus.h>`

Classes

- struct val

  values (seen as types) in polynomial ring
- struct val< coeffN >

  specialization for constants

Public Types

- using **zero** = val< typename Ring::zero >

  constant zero
- using **one** = val< typename Ring::one >

  constant one
- using **X** = val< typename Ring::one, typename Ring::zero >

  generator
- template<typename P >
  using simplify_t = typename simplify< P >::type

  simplifies a polynomial (recursively deletes highest degree if zero, do nothing otherwise)
- template<typename v1 , typename v2 >
  using add_t = typename add< v1, v2 >::type

  adds two polynomials
- template<typename v1 , typename v2 >
  using sub_t = typename sub< v1, v2 >::type

  substraction of two polynomials
- template<typename v1 , typename v2 >
  using mul_t = typename mul< v1, v2 >::type

  multiplication of two polynomials
- template<typename v1 , typename v2 >
  using eq_t = typename eq_helper< v1, v2 >::type

  equality operator
- template<typename v1 , typename v2 >
  using lt_t = typename lt_helper< v1, v2 >::type

  strict less operator
- template<typename v1 , typename v2 >
  using gt_t = typename gt_helper< v1, v2 >::type

  strict greater operator
- template<typename v1 , typename v2 >
  using div_t = typename div< v1, v2 >::q_type

  division operator
- template<typename v1 , typename v2 >
  using mod_t = typename div_helper< v1, v2, zero, v1 >::mod_type

  modulo operator
- template<typename coeff , size_t deg>
  using monomial_t = typename monomial< coeff, deg >::type

  monomial : coeff X^deg
- template<typename v >
  using derive_t = typename derive_helper< v >::type

derivation operator

- template<typename v >
  using pos_t = typename Ring::template pos_t< typename v::aN >

  checks for positivity (an > 0)
- template<typename v1 , typename v2 >
  using gcd_t = std::conditional_t< Ring::is_euclidean_domain, typename make_unit< gcd_t< polynomial< Ring >, v1, v2 > >::type, void >

  greatest common divisor of two polynomials
- template<auto x>
  using **inject_constant_t** = val< typename Ring::template inject_constant_t< x > >
- template<typename v >
  using **inject_ring_t** = val< v >

Static Public Attributes

- static constexpr bool **is_field** = false
- static constexpr bool **is_euclidean_domain** = Ring::is_euclidean_domain
- template<typename v >
  static constexpr bool pos_v = pos_t<v>::value

  positivity operator

5.10.1 Detailed Description

template<typename Ring>
requires IsEuclideanDomain<Ring>
struct aerobus::polynomial< Ring >

polynomial with coefficients in Ring Ring must be an integral domain

5.10.2 Member Typedef Documentation

5.10.2.1 add_t

```
template<typename Ring >
template<typename v1 , typename v2 >
using aerobus::polynomial< Ring >::add_t = typename add<v1, v2>::type
```

adds two polynomials

Template Parameters

v1	
v2	

5.10.2.2 derive_t

```
template<typename Ring >
```

```
template<typename v >
using aerobus::polynomial< Ring >::derive_t = typename derive_helper<v>::type
```

derivation operator

Template Parameters

v	

5.10.2.3 div_t

```
template<typename Ring >
template<typename v1 , typename v2 >
using aerobus::polynomial< Ring >::div_t = typename div<v1, v2>::q_type
```

division operator

Template Parameters

v1	
v2	

5.10.2.4 eq_t

```
template<typename Ring >
template<typename v1 , typename v2 >
using aerobus::polynomial< Ring >::eq_t = typename eq_helper<v1, v2>::type
```

equality operator

Template Parameters

v1	
v2	

5.10.2.5 gcd_t

```
template<typename Ring >
template<typename v1 , typename v2 >
using aerobus::polynomial< Ring >::gcd_t = std::conditional_t< Ring::is_euclidean_domain,
typename make_unit<gcd_t<polynomial<Ring>, v1, v2> >::type, void>
```

greatest common divisor of two polynomials

Template Parameters

v1	
v2	

5.10.2.6 gt_t

```
template<typename Ring >
template<typename v1 , typename v2 >
using aerobus::polynomial< Ring >::gt_t = typename gt_helper<v1, v2>::type
```

strict greater operator

Template Parameters

v1	
v2	

5.10.2.7 lt_t

```
template<typename Ring >
template<typename v1 , typename v2 >
using aerobus::polynomial< Ring >::lt_t = typename lt_helper<v1, v2>::type
```

strict less operator

Template Parameters

v1	
v2	

5.10.2.8 mod_t

```
template<typename Ring >
template<typename v1 , typename v2 >
using aerobus::polynomial< Ring >::mod_t = typename div_helper<v1, v2, zero, v1>::mod_type
```

modulo operator

Template Parameters

v1	
v2	

5.10.2.9 monomial_t

```
template<typename Ring >
template<typename coeff , size_t deg>
using aerobus::polynomial< Ring >::monomial_t = typename monomial<coeff, deg>::type
```

monomial : coeff X^deg

Template Parameters

coeff	
deg	

5.10.2.10 mul_t

```
template<typename Ring >
template<typename v1 , typename v2 >
using aerobus::polynomial< Ring >::mul_t = typename mul<v1, v2>::type
```

multiplication of two polynomials

Template Parameters

v1	
v2	

5.10.2.11 pos_t

```
template<typename Ring >
template<typename v >
using aerobus::polynomial< Ring >::pos_t = typename Ring::template pos_t<typename v::aN>
```

checks for positivity (an $>$ 0)

Template Parameters

v	

5.10.2.12 simplify_t

```
template<typename Ring >
template<typename P >
using aerobus::polynomial< Ring >::simplify_t = typename simplify<P>::type
```

simplifies a polynomial (recursively deletes highest degree if zero, do nothing otherwise)

Template Parameters

P	

5.10.2.13 sub_t

```
template<typename Ring >
```

```
template<typename v1 , typename v2 >
using aerobus::polynomial< Ring >::sub_t = typename sub<v1, v2>::type
```

substraction of two polynomials

Template Parameters

v1	
v2	

5.10.3 Member Data Documentation

5.10.3.1 pos_v

```
template<typename Ring >
template<typename v >
constexpr bool aerobus::polynomial< Ring >::pos_v = pos_t<v>::value  [static], [constexpr]
```

positivity operator

Template Parameters

v	a value in polynomial::val

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.11 aerobus::type_list< Ts >::pop_front Struct Reference

removes types from head of the list

`#include <aerobus.h>`

Public Types

- using **type** = typename internal::pop_front_h< Ts... >::head
  type that was previously head of the list
- using **tail** = typename internal::pop_front_h< Ts... >::tail
  remaining types in parent list when front is removed

5.11.1 Detailed Description

template<typename... Ts>
struct aerobus::type_list< Ts >::pop_front

removes types from head of the list

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.12 aerobus::Quotient< Ring, X > Struct Template Reference

Quotient ring by the principal ideal generated by 'X' With i32 as Ring and i32::val<2> as X, Quotient is Z/2Z.

`#include <aerobus.h>`

Classes

- struct val

  projection values in the quotient ring

Public Types

- using **zero** = val< typename Ring::zero >

  zero value
- using **one** = val< typename Ring::one >

  one
- template<typename v1 , typename v2 >
  using add_t = val< typename Ring::template add_t< typename v1::type, typename v2::type > >

  addition operator
- template<typename v1 , typename v2 >
  using mul_t = val< typename Ring::template mul_t< typename v1::type, typename v2::type > >

  substraction operator
- template<typename v1 , typename v2 >
  using div_t = val< typename Ring::template div_t< typename v1::type, typename v2::type > >

  division operator
- template<typename v1 , typename v2 >
  using mod_t = val< typename Ring::template mod_t< typename v1::type, typename v2::type > >

  modulus operator
- template<typename v1 , typename v2 >
  using eq_t = typename Ring::template eq_t< typename v1::type, typename v2::type >

  equality operator (as type)
- template<typename v1 >
  using pos_t = std::true_type

  positivity operator always true
- template<auto x>
  using **inject_constant_t** = val< typename Ring::template inject_constant_t< x > >
- template<typename v >
  using **inject_ring_t** = val< v >

Static Public Attributes

- template<typename v1 , typename v2 >
  static constexpr bool eq_v = Ring::template eq_t<typename v1::type, typename v2::type>::value

  addition operator (as boolean value)
- template<typename v >
  static constexpr bool pos_v = pos_t<v>::value

  positivity operator always true
- static constexpr bool **is_euclidean_domain** = true

  quotien rings are euclidean domain

5.12.1 Detailed Description

template<typename Ring, typename X>
requires IsRing<Ring>
struct aerobus::Quotient< Ring, X >

Quotient ring by the principal ideal generated by 'X' With i32 as Ring and i32::val<2> as X, Quotient is Z/2Z.

Template Parameters

Ring	A ring type, such as 'i32', must satisfy the IsRing concept
X	a value in Ring, such as i32::val<2>

5.12.2 Member Typedef Documentation

5.12.2.1 add_t

```
template<typename Ring , typename X >
template<typename v1 , typename v2 >
using aerobus::Quotient< Ring, X >::add_t = val<typename Ring::template add_t<typename v1::type,
typename v2::type> >
```

addition operator

Template Parameters

v1	a value in quotient ring
v2	a value in quotient ring

5.12.2.2 div_t

```
template<typename Ring , typename X >
template<typename v1 , typename v2 >
using aerobus::Quotient< Ring, X >::div_t = val<typename Ring::template div_t<typename v1::type,
typename v2::type> >
```

division operator

Template Parameters

v1	a value in quotient ring
v2	a value in quotient ring

5.12.2.3 eq_t

```
template<typename Ring , typename X >
template<typename v1 , typename v2 >
```

```
using aerobus::Quotient< Ring, X >::eq_t = typename Ring::template eq_t<typename v1::type,
typename v2::type>
```

equality operator (as type)

Template Parameters

v1	a value in quotient ring
v2	a value in quotient ring

5.12.2.4 mod_t

```
template<typename Ring , typename X >
template<typename v1 , typename v2 >
using aerobus::Quotient< Ring, X >::mod_t = val<typename Ring::template mod_t<typename v1::type,
typename v2::type> >
```

modulus operator

Template Parameters

v1	a value in quotient ring
v2	a value in quotient ring

5.12.2.5 mul_t

```
template<typename Ring , typename X >
template<typename v1 , typename v2 >
using aerobus::Quotient< Ring, X >::mul_t = val<typename Ring::template mul_t<typename v1::type,
typename v2::type> >
```

substraction operator

Template Parameters

v1	a value in quotient ring
v2	a value in quotient ring

5.12.2.6 pos_t

```
template<typename Ring , typename X >
template<typename v1 >
using aerobus::Quotient< Ring, X >::pos_t = std::true_type
```

positivity operator always true

Template Parameters

v1	a value in quotient ring

5.12.3 Member Data Documentation

5.12.3.1 eq_v

```
template<typename Ring , typename X >
template<typename v1 , typename v2 >
constexpr bool aerobus::Quotient< Ring, X >::eq_v = Ring::template eq_t<typename v1::type,
typename v2::type>::value  [static], [constexpr]
```

addition operator (as boolean value)

Template Parameters

v1	a value in quotient ring
v2	a value in quotient ring

5.12.3.2 pos_v

```
template<typename Ring , typename X >
template<typename v >
constexpr bool aerobus::Quotient< Ring, X >::pos_v = pos_t<v>::value  [static], [constexpr]
```

positivity operator always true

Template Parameters

v1	a value in quotient ring

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.13 aerobus::type_list< Ts >::split< index > Struct Template Reference

splits list at index

```
#include <aerobus.h>
```

Public Types

- using **head** = typename inner::head
- using **tail** = typename inner::tail

5.13.1 Detailed Description

template<typename... Ts>
template<size_t index>
struct aerobus::type_list< Ts >::split< index >

splits list at index

Template Parameters

index	

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.14 aerobus::type_list< Ts > Struct Template Reference

Empty pure template struct to handle type list.

Classes

- struct pop_front
  removes types from head of the list
- struct split
  splits list at index

Public Types

- template<typename T >
  using push_front = type_list< T, Ts... >
  Adds T to front of the list.
- template<size_t index>
  using at = internal::type_at_t< index, Ts... >
  returns type at index
- template<typename T >
  using push_back = type_list< Ts..., T >
  pushes T at the tail of the list
- template<typename U >
  using concat = typename concat_h< U >::type
  concatenates two list into one
- template<typename T , size_t index>
  using insert = typename internal::insert_h< index, type_list< Ts... >, T >::type
  inserts type at index
- template<size_t index>
  using remove = typename internal::remove_h< index, type_list< Ts... > >::type
  removes type at index

Static Public Attributes

- static constexpr size_t **length** = sizeof...(Ts)

  length of list

5.14.1 Detailed Description

template<typename... Ts>
struct aerobus::type_list< Ts >

Empty pure template struct to handle type list.

5.14.2 Member Typedef Documentation

5.14.2.1 at

```
template<typename...  Ts>
template<size_t index>
using aerobus::type_list< Ts >::at = internal::type_at_t<index, Ts...>
```

returns type at index

Template Parameters

index	

5.14.2.2 concat

```
template<typename...  Ts>
template<typename U >
using aerobus::type_list< Ts >::concat = typename concat_h<U>::type
```

concatenates two list into one

Template Parameters

U	

5.14.2.3 insert

```
template<typename...  Ts>
template<typename T , size_t index>
using aerobus::type_list< Ts >::insert = typename internal::insert_h<index, type_list<Ts...>,
T>::type
```

inserts type at index

Template Parameters

index	
T	

5.14.2.4 push_back

```
template<typename...  Ts>
template<typename T >
using aerobus::type_list< Ts >::push_back = type_list<Ts..., T>
```

pushes T at the tail of the list

Template Parameters

T	

5.14.2.5 push_front

```
template<typename...  Ts>
template<typename T >
using aerobus::type_list< Ts >::push_front = type_list<T, Ts...>
```

Adds T to front of the list.

Template Parameters

T	

5.14.2.6 remove

```
template<typename...  Ts>
template<size_t index>
using aerobus::type_list< Ts >::remove = typename internal::remove_h<index, type_list<Ts...>
>::type
```

removes type at index

Template Parameters

index	

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.15 aerobus::type_list<> Struct Reference

specialization for empty type list

`#include <aerobus.h>`

Public Types

- template<typename T >
  using **push_front** = type_list< T >
- template<typename T >
  using **push_back** = type_list< T >
- template<typename U >
  using **concat** = U
- template<typename T , size_t index>
  using **insert** = type_list< T >

Static Public Attributes

- static constexpr size_t **length** = 0

5.15.1 Detailed Description

specialization for empty type list

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.16 aerobus::i32::val< x > Struct Template Reference

values in i32, again represented as types

`#include <aerobus.h>`

Public Types

- using **enclosing_type** = i32

  Enclosing ring type.
- using **is_zero_t** = std::bool_constant< x==0 >

  is value zero

Static Public Member Functions

- template<typename valueType >
  static constexpr valueType get ()
  cast x into valueType
- static std::string **to_string** ()
  string representation of value
- template<typename valueRing >
  static constexpr valueRing eval (const valueRing &v)
  cast x into valueRing

Static Public Attributes

- static constexpr int32_t **v** = x
  actual value stored in val type

5.16.1 Detailed Description

template<int32_t x>
struct aerobus::i32::val< x >

values in i32, again represented as types

Template Parameters

x	an actual integer

5.16.2 Member Function Documentation

5.16.2.1 eval()

```
template<int32_t x>
template<typename valueRing >
static constexpr valueRing aerobus::i32::val< x >::eval (
            const valueRing & v )  [inline], [static], [constexpr]
```

cast x into valueRing

Template Parameters

valueRing	double for example

5.16.2.2 get()

```
template<int32_t x>
template<typename valueType >
static constexpr valueType aerobus::i32::val< x >::get ( )  [inline], [static], [constexpr]
```

cast x into valueType

Template Parameters

valueType	double for example

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.17 aerobus::i64::val< x > Struct Template Reference

values in i64

`#include <aerobus.h>`

Public Types

- using **enclosing_type** = i64
  enclosing ring type
- using **is_zero_t** = std::bool_constant< x==0 >
  is value zero

Static Public Member Functions

- template<typename valueType >
  static constexpr valueType get ()
  cast value in valueType
- static std::string **to_string** ()
  string representation
- template<typename valueRing >
  static constexpr valueRing eval (const valueRing &v)
  cast value in valueRing

Static Public Attributes

- static constexpr int64_t **v** = x
  actual value

5.17.1 Detailed Description

template<int64_t x>
struct aerobus::i64::val< x >

values in i64

Template Parameters

x	an actual integer

5.17.2 Member Function Documentation

5.17.2.1 eval()

```
template<int64_t x>
template<typename valueRing >
static constexpr valueRing aerobus::i64::val< x >::eval (
             const valueRing & v )  [inline], [static], [constexpr]
```

cast value in valueRing

Template Parameters

valueRing	(double for example)

5.17.2.2 get()

```
template<int64_t x>
template<typename valueType >
static constexpr valueType aerobus::i64::val< x >::get ( )  [inline], [static], [constexpr]
```

cast value in valueType

Template Parameters

valueType	(double for example)

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.18 aerobus::polynomial< Ring >::val< coeffN, coeffs > Struct Template Reference

values (seen as types) in polynomial ring

```
#include <aerobus.h>
```

Public Types

- using **enclosing_type** = polynomial< Ring >

  enclosing ring type
- using **aN** = coeffN

  heavy weight coefficient (non zero)
- using **strip** = val< coeffs... >

  remove largest coefficient
- using **is_zero_t** = std::bool_constant<(degree==0) &&(aN::is_zero_t::value)>

  true_type if polynomial is constant zero
- template<size_t index>
  using coeff_at_t = typename coeff_at< index >::type

  type of coefficient at index

Static Public Member Functions

- static std::string to_string ()

  get a string representation of polynomial
- template<typename valueRing >
  static constexpr valueRing eval (const valueRing &x)

  evaluates polynomial seen as a function operating on ValueRing

Static Public Attributes

- static constexpr size_t **degree** = sizeof...(coeffs)

  degree of the polynomial
- static constexpr bool **is_zero_v** = is_zero_t::value

  true if polynomial is constant zero

5.18.1 Detailed Description

template<typename Ring>
template<typename coeffN, typename... coeffs>
struct aerobus::polynomial< Ring >::val< coeffN, coeffs >

values (seen as types) in polynomial ring

Template Parameters

coeffN	high degree coefficient
...coeffs	lower degree coefficients

5.18.2 Member Typedef Documentation

5.18.2.1 coeff_at_t

```
template<typename Ring >
template<typename coeffN , typename...  coeffs>
```

```
template<size_t index>
using aerobus::polynomial< Ring >::val< coeffN, coeffs >::coeff_at_t = typename coeff_↩
at<index>::type
```

type of coefficient at index

Template Parameters

index	

5.18.3 Member Function Documentation

5.18.3.1 eval()

```
template<typename Ring >
template<typename coeffN , typename...  coeffs>
template<typename valueRing >
static constexpr valueRing aerobus::polynomial< Ring >::val< coeffN, coeffs >::eval (
            const valueRing & x )  [inline], [static], [constexpr]
```

evaluates polynomial seen as a function operating on ValueRing

Template Parameters

valueRing	usually float or double

Parameters

x	value

Returns

P(x)

5.18.3.2 to_string()

```
template<typename Ring >
template<typename coeffN , typename...  coeffs>
static std::string aerobus::polynomial< Ring >::val< coeffN, coeffs >::to_string ( )  [inline],
[static]
```

get a string representation of polynomial

Returns

something like a_n X^n + ... + a_1 X + a_0

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.19 aerobus::Quotient< Ring, X >::val< V > Struct Template Reference

projection values in the quotient ring

`#include <aerobus.h>`

Public Types

- using **type** = abs_t< typename Ring::template mod_t< V, X > >

5.19.1 Detailed Description

template<typename Ring, typename X>
template<typename V>
struct aerobus::Quotient< Ring, X >::val< V >

projection values in the quotient ring

Template Parameters

V	a value from 'Ring'

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.20 aerobus::zpz< p >::val< x > Struct Template Reference

Public Types

- using **enclosing_type** = zpz< p >
  enclosing ring type
- using **is_zero_t** = std::bool_constant< x% p==0 >

Static Public Member Functions

- template<typename valueType >
  static constexpr valueType **get** ()
- static std::string **to_string** ()
- template<typename valueRing >
  static constexpr valueRing **eval** (const valueRing &v)

Static Public Attributes

- static constexpr int32_t **v** = x % p
  actual value

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.21 aerobus::polynomial< Ring >::val< coeffN > Struct Template Reference

specialization for constants

`#include <aerobus.h>`

Classes

- struct coeff_at
- struct coeff_at< index, std::enable_if_t<(index< 0||index > 0)> >
- struct coeff_at< index, std::enable_if_t<(index==0)> >

Public Types

- using **enclosing_type** = polynomial< Ring >
  enclosing ring type
- using **aN** = coeffN
- using **strip** = val< coeffN >
- using **is_zero_t** = std::bool_constant< aN::is_zero_t::value >
- template<size_t index>
  using **coeff_at_t** = typename coeff_at< index >::type

Static Public Member Functions

- static std::string **to_string** ()
- template<typename valueRing >
  static constexpr valueRing **eval** (const valueRing &x)

Static Public Attributes

- static constexpr size_t **degree** = 0
  degree
- static constexpr bool **is_zero_v** = is_zero_t::value

5.21.1 Detailed Description

template<typename Ring>
template<typename coeffN>
struct aerobus::polynomial< Ring >::val< coeffN >

specialization for constants

Template Parameters

coeffN	

The documentation for this struct was generated from the following file:

- src/aerobus.h

5.22 aerobus::zpz< p > Struct Template Reference

`#include <aerobus.h>`

Classes

- struct val

Public Types

- using **inner_type** = int32_t
- template<auto x>
  using **inject_constant_t** = val< static_cast< int32_t >(x)>
- using **zero** = val< 0 >
- using **one** = val< 1 >
- template<typename v1 , typename v2 >
  using add_t = typename add< v1, v2 >::type

  addition operator
- template<typename v1 , typename v2 >
  using sub_t = typename sub< v1, v2 >::type

  substraction operator
- template<typename v1 , typename v2 >
  using mul_t = typename mul< v1, v2 >::type

  multiplication operator
- template<typename v1 , typename v2 >
  using div_t = typename div< v1, v2 >::type

  division operator
- template<typename v1 , typename v2 >
  using mod_t = typename remainder< v1, v2 >::type

  modulo operator
- template<typename v1 , typename v2 >
  using gt_t = typename gt< v1, v2 >::type

  strictly greater operator (type)
- template<typename v1 , typename v2 >
  using lt_t = typename lt< v1, v2 >::type

  strictly smaller operator (type)
- template<typename v1 , typename v2 >
  using eq_t = typename eq< v1, v2 >::type

  equality operator (type)
- template<typename v1 , typename v2 >
  using gcd_t = gcd_t< i32, v1, v2 >

  greatest common divisor
- template<typename v1 >
  using pos_t = typename pos< v1 >::type

  positivity operator (type)

Static Public Attributes

- static constexpr bool **is_field** = is_prime<p>::value
- static constexpr bool **is_euclidean_domain** = true
- template<typename v1 , typename v2 >
  static constexpr bool gt_v = gt_t<v1, v2>::value

  strictly greater operator (booleanvalue)
- template<typename v1 , typename v2 >
  static constexpr bool lt_v = lt_t<v1, v2>::value

  strictly smaller operator (booleanvalue)
- template<typename v1 , typename v2 >
  static constexpr bool eq_v = eq_t<v1, v2>::value

  equality operator (booleanvalue)
- template<typename v >
  static constexpr bool pos_v = pos_t<v>::value

  positivity operator (boolean value)

5.22.1 Detailed Description

template<int32_t p>
struct aerobus::zpz< p >

congruence classes of integers for a modulus if p is prime, zpz is a field, otherwise an integral domain with all related operations

5.22.2 Member Typedef Documentation

5.22.2.1 add_t

```
template<int32_t p>
template<typename v1 , typename v2 >
using aerobus::zpz< p >::add_t = typename add<v1, v2>::type
```

addition operator

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.2.2 div_t

```
template<int32_t p>
template<typename v1 , typename v2 >
using aerobus::zpz< p >::div_t = typename div<v1, v2>::type
```

division operator

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.2.3 eq_t

```
template<int32_t p>
template<typename v1 , typename v2 >
using aerobus::zpz< p >::eq_t = typename eq<v1, v2>::type
```

equality operator (type)

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.2.4 gcd_t

```
template<int32_t p>
template<typename v1 , typename v2 >
using aerobus::zpz< p >::gcd_t = gcd_t<i32, v1, v2>
```

greatest common divisor

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.2.5 gt_t

```
template<int32_t p>
template<typename v1 , typename v2 >
using aerobus::zpz< p >::gt_t = typename gt<v1, v2>::type
```

strictly greater operator (type)

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.2.6 lt_t

```
template<int32_t p>
template<typename v1 , typename v2 >
using aerobus::zpz< p >::lt_t = typename lt<v1, v2>::type
```

strictly smaller operator (type)

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.2.7 mod_t

```
template<int32_t p>
template<typename v1 , typename v2 >
using aerobus::zpz< p >::mod_t = typename remainder<v1, v2>::type
```

modulo operator

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.2.8 mul_t

```
template<int32_t p>
template<typename v1 , typename v2 >
using aerobus::zpz< p >::mul_t = typename mul<v1, v2>::type
```

multiplication operator

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.2.9 pos_t

```
template<int32_t p>
template<typename v1 >
using aerobus::zpz< p >::pos_t = typename pos<v1>::type
```

positivity operator (type)

Template Parameters

v1	a value in zpz::val

5.22.2.10 sub_t

```
template<int32_t p>
template<typename v1 , typename v2 >
using aerobus::zpz< p >::sub_t = typename sub<v1, v2>::type
```

substraction operator

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.3 Member Data Documentation

5.22.3.1 eq_v

```
template<int32_t p>
template<typename v1 , typename v2 >
constexpr bool aerobus::zpz< p >::eq_v = eq_t<v1, v2>::value  [static], [constexpr]
```

equality operator (booleanvalue)

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.3.2 gt_v

```
template<int32_t p>
template<typename v1 , typename v2 >
constexpr bool aerobus::zpz< p >::gt_v = gt_t<v1, v2>::value  [static], [constexpr]
```

strictly greater operator (booleanvalue)

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.3.3 lt_v

```
template<int32_t p>
template<typename v1 , typename v2 >
constexpr bool aerobus::zpz< p >::lt_v = lt_t<v1, v2>::value  [static], [constexpr]
```

strictly smaller operator (booleanvalue)

Template Parameters

v1	a value in zpz::val
v2	a value in zpz::val

5.22.3.4 pos_v

```
template<int32_t p>
template<typename v >
constexpr bool aerobus::zpz< p >::pos_v = pos_t<v>::value  [static], [constexpr]
```

positivity operator (boolean value)

Template Parameters

v1	a value in zpz::val

The documentation for this struct was generated from the following file:

- src/aerobus.h

Chapter 6

File Documentation

6.1 src/aerobus.h File Reference

```
#include <cstdint>
#include <cstddef>
#include <cstring>
#include <type_traits>
#include <utility>
#include <algorithm>
#include <functional>
#include <string>
#include <concepts>
#include <array>
```

Include dependency graph for aerobus.h:

6.2 aerobus.h

Go to the documentation of this file.

```
00001 // -*- lsst-c++ -*-
00002 #ifndef __INC_AEROBUS__ // NOLINT
00003 #define __INC_AEROBUS__
00004
00005 #include <cstdint>
00006 #include <cstddef>
00007 #include <cstring>
00008 #include <type_traits>
00009 #include <utility>
00010 #include <algorithm>
00011 #include <functional>
00012 #include <string>
00013 #include <concepts> // NOLINT
00014 #include <array>
00015
00016
00017 #ifdef _MSC_VER
00018 #define ALIGNED(x) __declspec(align(x))
00019 #define INLINED __forceinline
00020 #else
00021 #define ALIGNED(x) __attribute__((aligned(x)))
00022 #define INLINED __attribute__((always_inline)) inline
00023 #endif
00024
00027
00028 // aligned allocation
00029 namespace aerobus {
00036     template<typename T>
00037     T* aligned_malloc(size_t count, size_t alignment) {
00038         #ifdef _MSC_VER
```

```
00039         return static_cast<T*>(_aligned_malloc(count * sizeof(T), alignment));
00040         #else
00041         return static_cast<T*>(aligned_alloc(alignment, count * sizeof(T)));
00042         #endif
00043     }
00044 }  // namespace aerobus
00045
00046 // concepts
00047 namespace aerobus {
00049     template <typename R>
00050     concept IsRing = requires {
00051         typename R::one;
00052         typename R::zero;
00053         typename R::template add_t<typename R::one, typename R::one>;
00054         typename R::template sub_t<typename R::one, typename R::one>;
00055         typename R::template mul_t<typename R::one, typename R::one>;
00056     };
00057
00059     template <typename R>
00060     concept IsEuclideanDomain = IsRing<R> && requires {
00061         typename R::template div_t<typename R::one, typename R::one>;
00062         typename R::template mod_t<typename R::one, typename R::one>;
00063         typename R::template gcd_t<typename R::one, typename R::one>;
00064         typename R::template eq_t<typename R::one, typename R::one>;
00065         typename R::template pos_t<typename R::one>;
00066
00067         R::template pos_v<typename R::one> == true;
00068         // typename R::template gt_t<typename R::one, typename R::zero>;
00069         R::is_euclidean_domain == true;
00070     };
00071
00073     template<typename R>
00074     concept IsField = IsEuclideanDomain<R> && requires {
00075         R::is_field == true;
00076     };
00077 }  // namespace aerobus
00078
00079 // utilities
00080 namespace aerobus {
00081     namespace internal {
00082         template<template<typename...> typename TT, typename T>
00083         struct is_instantiation_of : std::false_type { };
00084
00085         template<template<typename...> typename TT, typename... Ts>
00086         struct is_instantiation_of<TT, TT<Ts...>> : std::true_type { };
00087
00088         template<template<typename...> typename TT, typename T>
00089         inline constexpr bool is_instantiation_of_v = is_instantiation_of<TT, T>::value;
00090
00091         template <int64_t i, typename T, typename... Ts>
00092         struct type_at {
00093             static_assert(i < sizeof...(Ts) + 1, "index out of range");
00094             using type = typename type_at<i - 1, Ts...>::type;
00095         };
00096
00097         template <typename T, typename... Ts> struct type_at<0, T, Ts...> {
00098             using type = T;
00099         };
00100
00101         template <size_t i, typename... Ts>
00102         using type_at_t = typename type_at<i, Ts...>::type;
00103
00104
00105         template<size_t n, size_t i, typename E = void>
00106         struct _is_prime {};
00107
00108         template<size_t i>
00109         struct _is_prime<0, i> {
00110             static constexpr bool value = false;
00111         };
00112
00113         template<size_t i>
00114         struct _is_prime<1, i> {
00115             static constexpr bool value = false;
00116         };
00117
00118         template<size_t i>
00119         struct _is_prime<2, i> {
00120             static constexpr bool value = true;
00121         };
00122
00123         template<size_t i>
00124         struct _is_prime<3, i> {
00125             static constexpr bool value = true;
00126         };
00127
00128         template<size_t i>
```

```
00129         struct _is_prime<5, i> {
00130             static constexpr bool value = true;
00131         };
00132
00133         template<size_t i>
00134         struct _is_prime<7, i> {
00135             static constexpr bool value = true;
00136         };
00137
00138         template<size_t n, size_t i>
00139         struct _is_prime<n, i, std::enable_if_t<(n != 2 && n % 2 == 0)>> {
00140             static constexpr bool value = false;
00141         };
00142
00143         template<size_t n, size_t i>
00144         struct _is_prime<n, i, std::enable_if_t<(n != 2 && n != 3 && n % 2 != 0 && n % 3 == 0)>> {
00145             static constexpr bool value = false;
00146         };
00147
00148         template<size_t n, size_t i>
00149         struct _is_prime<n, i, std::enable_if_t<(n >= 9 && i * i > n)>> {
00150             static constexpr bool value = true;
00151         };
00152
00153         template<size_t n, size_t i>
00154         struct _is_prime<n, i, std::enable_if_t<(
00155             n % i == 0 &&
00156             n >= 9 &&
00157             n % 3 != 0 &&
00158             n % 2 != 0 &&
00159             i * i > n)>> {
00160             static constexpr bool value = true;
00161         };
00162
00163         template<size_t n, size_t i>
00164         struct _is_prime<n, i, std::enable_if_t<(
00165             n % (i+2) == 0 &&
00166             n >= 9 &&
00167             n % 3 != 0 &&
00168             n % 2 != 0 &&
00169             i * i <= n)>> {
00170             static constexpr bool value = true;
00171         };
00172
00173         template<size_t n, size_t i>
00174         struct _is_prime<n, i, std::enable_if_t<(
00175                 n % (i+2) != 0 &&
00176                 n % i != 0 &&
00177                 n >= 9 &&
00178                 n % 3 != 0 &&
00179                 n % 2 != 0 &&
00180                 (i * i <= n))>> {
00181             static constexpr bool value = _is_prime<n, i+6>::value;
00182         };
00183
00184     }  // namespace internal
00185
00188     template<size_t n>
00189     struct is_prime {
00191         static constexpr bool value = internal::_is_prime<n, 5>::value;
00192     };
00193
00197     template<size_t n>
00198     static constexpr bool is_prime_v = is_prime<n>::value;
00199
00200     // gcd
00201     namespace internal {
00202         template <std::size_t... Is>
00203         constexpr auto index_sequence_reverse(std::index_sequence<Is...> const&)
00204             -> decltype(std::index_sequence<sizeof...(Is) - 1U - Is...>{});
00205
00206         template <std::size_t N>
00207         using make_index_sequence_reverse
00208             = decltype(index_sequence_reverse(std::make_index_sequence<N>{}));
00209
00215         template<typename Ring, typename E = void>
00216         struct gcd;
00217
00218         template<typename Ring>
00219         struct gcd<Ring, std::enable_if_t<Ring::is_euclidean_domain>> {
00220             template<typename A, typename B, typename E = void>
00221             struct gcd_helper {};
00222
00223             // B = 0, A > 0
00224             template<typename A, typename B>
00225             struct gcd_helper<A, B, std::enable_if_t<
00226                 ((B::is_zero_t::value) &&
```

```
00227                   (Ring::template gt_t<A, typename Ring::zero>::value))» {
00228               using type = A;
00229           };
00230
00231           // B = 0, A < 0
00232           template<typename A, typename B>
00233           struct gcd_helper<A, B, std::enable_if_t<
00234               ((B::is_zero_t::value) &&
00235                   !(Ring::template gt_t<A, typename Ring::zero>::value))» {
00236               using type = typename Ring::template sub_t<typename Ring::zero, A>;
00237           };
00238
00239           // B != 0
00240           template<typename A, typename B>
00241           struct gcd_helper<A, B, std::enable_if_t<
00242               (!B::is_zero_t::value)
00243               » {
00244           private: // NOLINT
00245               // A / B
00246               using k = typename Ring::template div_t<A, B>;
00247               // A - (A/B)*B = A % B
00248               using m = typename Ring::template sub_t<A, typename Ring::template mul_t<k, B»;
00249
00250           public:
00251               using type = typename gcd_helper<B, m>::type;
00252           };
00253
00254           template<typename A, typename B>
00255           using type = typename gcd_helper<A, B>::type;
00256       };
00257   }  // namespace internal
00258
00259   // vadd and vmul
00260   namespace internal {
00261       template<typename... vals>
00262       struct vmul {};
00263
00264       template<typename v1, typename... vals>
00265       struct vmul<v1, vals...> {
00266           using type = typename v1::enclosing_type::template mul_t<v1, typename
      vmul<vals...>::type>;
00267       };
00268
00269       template<typename v1>
00270       struct vmul<v1> {
00271           using type = v1;
00272       };
00273
00274       template<typename... vals>
00275       struct vadd {};
00276
00277       template<typename v1, typename... vals>
00278       struct vadd<v1, vals...> {
00279           using type = typename v1::enclosing_type::template add_t<v1, typename
      vadd<vals...>::type>;
00280       };
00281
00282       template<typename v1>
00283       struct vadd<v1> {
00284           using type = v1;
00285       };
00286   }  // namespace internal
00287
00290   template<typename T, typename A, typename B>
00291   using gcd_t = typename internal::gcd<T>::template type<A, B>;
00292
00296   template<typename... vals>
00297   using vadd_t = typename internal::vadd<vals...>::type;
00298
00302   template<typename... vals>
00303   using vmul_t = typename internal::vmul<vals...>::type;
00304
00308   template<typename val>
00309   requires IsEuclideanDomain<typename val::enclosing_type>
00310   using abs_t = std::conditional_t<
00311                   val::enclosing_type::template pos_v<val>,
00312                   val, typename val::enclosing_type::template sub_t<typename
      val::enclosing_type::zero, val»;
00313 }  // namespace aerobus
00314
00315 namespace aerobus {
00320   template<typename Ring, typename X>
00321   requires IsRing<Ring>
00322   struct Quotient {
00325       template <typename V>
00326       struct val {
00327        public:
```

```
00328             using type = abs_t<typename Ring::template mod_t<V, X>>;
00329         };
00330 
00332         using zero = val<typename Ring::zero>;
00333 
00335         using one = val<typename Ring::one>;
00336 
00340         template<typename v1, typename v2>
00341         using add_t = val<typename Ring::template add_t<typename v1::type, typename v2::type>>;
00342 
00346         template<typename v1, typename v2>
00347         using mul_t = val<typename Ring::template mul_t<typename v1::type, typename v2::type>>;
00348 
00352         template<typename v1, typename v2>
00353         using div_t = val<typename Ring::template div_t<typename v1::type, typename v2::type>>;
00354 
00358         template<typename v1, typename v2>
00359         using mod_t = val<typename Ring::template mod_t<typename v1::type, typename v2::type>>;
00360 
00364         template<typename v1, typename v2>
00365         using eq_t = typename Ring::template eq_t<typename v1::type, typename v2::type>;
00366 
00370         template<typename v1, typename v2>
00371         static constexpr bool eq_v = Ring::template eq_t<typename v1::type, typename v2::type>::value;
00372 
00376         template<typename v1>
00377         using pos_t = std::true_type;
00378 
00382         template<typename v>
00383         static constexpr bool pos_v = pos_t<v>::value;
00384 
00386         static constexpr bool is_euclidean_domain = true;
00387 
00391         template<auto x>
00392         using inject_constant_t = val<typename Ring::template inject_constant_t<x>>;
00393 
00397         template<typename v>
00398         using inject_ring_t = val<v>;
00399     };
00400 }  // namespace aerobus
00401 
00402 // type_list
00403 namespace aerobus {
00405     template <typename... Ts>
00406     struct type_list;
00407 
00408     namespace internal {
00409         template <typename T, typename... Us>
00410         struct pop_front_h {
00411             using tail = type_list<Us...>;
00412             using head = T;
00413         };
00414 
00415         template <size_t index, typename L1, typename L2>
00416         struct split_h {
00417          private:
00418             static_assert(index <= L2::length, "index ouf of bounds");
00419             using a = typename L2::pop_front::type;
00420             using b = typename L2::pop_front::tail;
00421             using c = typename L1::template push_back<a>;
00422 
00423          public:
00424             using head = typename split_h<index - 1, c, b>::head;
00425             using tail = typename split_h<index - 1, c, b>::tail;
00426         };
00427 
00428         template <typename L1, typename L2>
00429         struct split_h<0, L1, L2> {
00430             using head = L1;
00431             using tail = L2;
00432         };
00433 
00434         template <size_t index, typename L, typename T>
00435         struct insert_h {
00436             static_assert(index <= L::length, "index ouf of bounds");
00437             using s = typename L::template split<index>;
00438             using left = typename s::head;
00439             using right = typename s::tail;
00440             using ll = typename left::template push_back<T>;
00441             using type = typename ll::template concat<right>;
00442         };
00443 
00444         template <size_t index, typename L>
00445         struct remove_h {
00446             using s = typename L::template split<index>;
00447             using left = typename s::head;
00448             using right = typename s::tail;
```

```
00449             using rr = typename right::pop_front::tail;
00450             using type = typename left::template concat<rr>;
00451         };
00452     }  // namespace internal
00453
00457     template <typename... Ts>
00458     struct type_list {
00459      private:
00460         template <typename T>
00461         struct concat_h;
00462
00463         template <typename... Us>
00464         struct concat_h<type_list<Us...>> {
00465             using type = type_list<Ts..., Us...>;
00466         };
00467
00468      public:
00470         static constexpr size_t length = sizeof...(Ts);
00471
00474         template <typename T>
00475         using push_front = type_list<T, Ts...>;
00476
00479         template <size_t index>
00480         using at = internal::type_at_t<index, Ts...>;
00481
00483         struct pop_front {
00485             using type = typename internal::pop_front_h<Ts...>::head;
00487             using tail = typename internal::pop_front_h<Ts...>::tail;
00488         };
00489
00492         template <typename T>
00493         using push_back = type_list<Ts..., T>;
00494
00497         template <typename U>
00498         using concat = typename concat_h<U>::type;
00499
00502         template <size_t index>
00503         struct split {
00504          private:
00505             using inner = internal::split_h<index, type_list<>, type_list<Ts...>>;
00506
00507          public:
00508             using head = typename inner::head;
00509             using tail = typename inner::tail;
00510         };
00511
00515         template <typename T, size_t index>
00516         using insert = typename internal::insert_h<index, type_list<Ts...>, T>::type;
00517
00520         template <size_t index>
00521         using remove = typename internal::remove_h<index, type_list<Ts...>>::type;
00522     };
00523
00525     template <>
00526     struct type_list<> {
00527         static constexpr size_t length = 0;
00528
00529         template <typename T>
00530         using push_front = type_list<T>;
00531
00532         template <typename T>
00533         using push_back = type_list<T>;
00534
00535         template <typename U>
00536         using concat = U;
00537
00538         // TODO(jewave): assert index == 0
00539         template <typename T, size_t index>
00540         using insert = type_list<T>;
00541     };
00542 }  // namespace aerobus
00543
00544 // i32
00545 namespace aerobus {
00547     struct i32 {
00548         using inner_type = int32_t;
00551         template<int32_t x>
00552         struct val {
00554             using enclosing_type = i32;
00556             static constexpr int32_t v = x;
00557
00560             template<typename valueType>
00561             static constexpr valueType get() { return static_cast<valueType>(x); }
00562
00564             using is_zero_t = std::bool_constant<x == 0>;
00565
00567             static std::string to_string() {
```

```
00568                 return std::to_string(x);
00569             }
00570
00573             template<typename valueRing>
00574             static constexpr valueRing eval(const valueRing& v) {
00575                 return static_cast<valueRing>(x);
00576             }
00577         };
00578
00580         using zero = val<0>;
00582         using one = val<1>;
00584         static constexpr bool is_field = false;
00586         static constexpr bool is_euclidean_domain = true;
00590         template<auto x>
00591         using inject_constant_t = val<static_cast<int32_t>(x)>;
00592
00593         template<typename v>
00594         using inject_ring_t = v;
00595
00596     private:
00597         template<typename v1, typename v2>
00598         struct add {
00599             using type = val<v1::v + v2::v>;
00600         };
00601
00602         template<typename v1, typename v2>
00603         struct sub {
00604             using type = val<v1::v - v2::v>;
00605         };
00606
00607         template<typename v1, typename v2>
00608         struct mul {
00609             using type = val<v1::v* v2::v>;
00610         };
00611
00612         template<typename v1, typename v2>
00613         struct div {
00614             using type = val<v1::v / v2::v>;
00615         };
00616
00617         template<typename v1, typename v2>
00618         struct remainder {
00619             using type = val<v1::v % v2::v>;
00620         };
00621
00622         template<typename v1, typename v2>
00623         struct gt {
00624             using type = std::conditional_t<(v1::v > v2::v), std::true_type, std::false_type>;
00625         };
00626
00627         template<typename v1, typename v2>
00628         struct lt {
00629             using type = std::conditional_t<(v1::v < v2::v), std::true_type, std::false_type>;
00630         };
00631
00632         template<typename v1, typename v2>
00633         struct eq {
00634             using type = std::conditional_t<(v1::v == v2::v), std::true_type, std::false_type>;
00635         };
00636
00637         template<typename v1>
00638         struct pos {
00639             using type = std::bool_constant<(v1::v > 0)>;
00640         };
00641
00642     public:
00648         template<typename v1, typename v2>
00649         using add_t = typename add<v1, v2>::type;
00650
00656         template<typename v1, typename v2>
00657         using sub_t = typename sub<v1, v2>::type;
00658
00664         template<typename v1, typename v2>
00665         using mul_t = typename mul<v1, v2>::type;
00666
00672         template<typename v1, typename v2>
00673         using div_t = typename div<v1, v2>::type;
00674
00680         template<typename v1, typename v2>
00681         using mod_t = typename remainder<v1, v2>::type;
00682
00688         template<typename v1, typename v2>
00689         using gt_t = typename gt<v1, v2>::type;
00690
00696         template<typename v1, typename v2>
00697         using lt_t = typename lt<v1, v2>::type;
00698
```

```
00704         template<typename v1, typename v2>
00705         using eq_t = typename eq<v1, v2>::type;
00706
00711         template<typename v1, typename v2>
00712         static constexpr bool eq_v = eq_t<v1, v2>::value;
00713
00719         template<typename v1, typename v2>
00720         using gcd_t = gcd_t<i32, v1, v2>;
00721
00726         template<typename v>
00727         using pos_t = typename pos<v>::type;
00728
00733         template<typename v>
00734         static constexpr bool pos_v = pos_t<v>::value;
00735     };
00736 }  // namespace aerobus
00737
00738 // i64
00739 namespace aerobus {
00741     struct i64 {
00743         using inner_type = int64_t;
00746         template<int64_t x>
00747         struct val {
00749             using enclosing_type = i64;
00751             static constexpr int64_t v = x;
00752
00755             template<typename valueType>
00756             static constexpr valueType get() { return static_cast<valueType>(x); }
00757
00759             using is_zero_t = std::bool_constant<x == 0>;
00760
00762             static std::string to_string() {
00763                 return std::to_string(x);
00764             }
00765
00768             template<typename valueRing>
00769             static constexpr valueRing eval(const valueRing& v) {
00770                 return static_cast<valueRing>(x);
00771             }
00772         };
00773
00777         template<auto x>
00778         using inject_constant_t = val<static_cast<int64_t>(x)>;
00779
00784         template<typename v>
00785         using inject_ring_t = v;
00786
00788         using zero = val<0>;
00790         using one = val<1>;
00792         static constexpr bool is_field = false;
00794         static constexpr bool is_euclidean_domain = true;
00795
00796      private:
00797         template<typename v1, typename v2>
00798         struct add {
00799             using type = val<v1::v + v2::v>;
00800         };
00801
00802         template<typename v1, typename v2>
00803         struct sub {
00804             using type = val<v1::v - v2::v>;
00805         };
00806
00807         template<typename v1, typename v2>
00808         struct mul {
00809             using type = val<v1::v* v2::v>;
00810         };
00811
00812         template<typename v1, typename v2>
00813         struct div {
00814             using type = val<v1::v / v2::v>;
00815         };
00816
00817         template<typename v1, typename v2>
00818         struct remainder {
00819             using type = val<v1::v% v2::v>;
00820         };
00821
00822         template<typename v1, typename v2>
00823         struct gt {
00824             using type = std::conditional_t<(v1::v > v2::v), std::true_type, std::false_type>;
00825         };
00826
00827         template<typename v1, typename v2>
00828         struct lt {
00829             using type = std::conditional_t<(v1::v < v2::v), std::true_type, std::false_type>;
00830         };
```

```
00831
00832         template<typename v1, typename v2>
00833         struct eq {
00834             using type = std::conditional_t<(v1::v == v2::v), std::true_type, std::false_type>;
00835         };
00836
00837         template<typename v>
00838         struct pos {
00839             using type = std::bool_constant<(v::v > 0)>;
00840         };
00841
00842      public:
00847         template<typename v1, typename v2>
00848         using add_t = typename add<v1, v2>::type;
00849
00854         template<typename v1, typename v2>
00855         using sub_t = typename sub<v1, v2>::type;
00856
00861         template<typename v1, typename v2>
00862         using mul_t = typename mul<v1, v2>::type;
00863
00869         template<typename v1, typename v2>
00870         using div_t = typename div<v1, v2>::type;
00871
00876         template<typename v1, typename v2>
00877         using mod_t = typename remainder<v1, v2>::type;
00878
00884         template<typename v1, typename v2>
00885         using gt_t = typename gt<v1, v2>::type;
00886
00891         template<typename v1, typename v2>
00892         static constexpr bool gt_v = gt_t<v1, v2>::value;
00893
00899         template<typename v1, typename v2>
00900         using lt_t = typename lt<v1, v2>::type;
00901
00907         template<typename v1, typename v2>
00908         static constexpr bool lt_v = lt_t<v1, v2>::value;
00909
00915         template<typename v1, typename v2>
00916         using eq_t = typename eq<v1, v2>::type;
00917
00923         template<typename v1, typename v2>
00924         static constexpr bool eq_v = eq_t<v1, v2>::value;
00925
00931         template<typename v1, typename v2>
00932         using gcd_t = gcd_t<i64, v1, v2>;
00933
00938         template<typename v>
00939         using pos_t = typename pos<v>::type;
00940
00945         template<typename v>
00946         static constexpr bool pos_v = pos_t<v>::value;
00947     };
00948 }  // namespace aerobus
00949
00950 // z/pz
00951 namespace aerobus {
00956     template<int32_t p>
00957     struct zpz {
00958         using inner_type = int32_t;
00959         template<int32_t x>
00960         struct val {
00962             using enclosing_type = zpz<p>;
00964             static constexpr int32_t v = x % p;
00965
00966             template<typename valueType>
00967             static constexpr valueType get() { return static_cast<valueType>(x % p); }
00968
00969             using is_zero_t = std::bool_constant<x% p == 0>;
00970             static std::string to_string() {
00971                 return std::to_string(x % p);
00972             }
00973
00974             template<typename valueRing>
00975             static constexpr valueRing eval(const valueRing& v) {
00976                 return static_cast<valueRing>(x % p);
00977             }
00978         };
00979
00980         template<auto x>
00981         using inject_constant_t = val<static_cast<int32_t>(x)>;
00982
00983         using zero = val<0>;
00984         using one = val<1>;
00985         static constexpr bool is_field = is_prime<p>::value;
00986         static constexpr bool is_euclidean_domain = true;
```

```
00987
00988       private:
00989           template<typename v1, typename v2>
00990           struct add {
00991               using type = val<(v1::v + v2::v) % p>;
00992           };
00993
00994           template<typename v1, typename v2>
00995           struct sub {
00996               using type = val<(v1::v - v2::v) % p>;
00997           };
00998
00999           template<typename v1, typename v2>
01000           struct mul {
01001               using type = val<(v1::v* v2::v) % p>;
01002           };
01003
01004           template<typename v1, typename v2>
01005           struct div {
01006               using type = val<(v1::v% p) / (v2::v % p)>;
01007           };
01008
01009           template<typename v1, typename v2>
01010           struct remainder {
01011               using type = val<(v1::v% v2::v) % p>;
01012           };
01013
01014           template<typename v1, typename v2>
01015           struct gt {
01016               using type = std::conditional_t<(v1::v% p > v2::v% p), std::true_type, std::false_type>;
01017           };
01018
01019           template<typename v1, typename v2>
01020           struct lt {
01021               using type = std::conditional_t<(v1::v% p < v2::v% p), std::true_type, std::false_type>;
01022           };
01023
01024           template<typename v1, typename v2>
01025           struct eq {
01026               using type = std::conditional_t<(v1::v% p == v2::v % p), std::true_type, std::false_type>;
01027           };
01028
01029           template<typename v1>
01030           struct pos {
01031               using type = std::bool_constant<(v1::v > 0)>;
01032           };
01033
01034       public:
01038           template<typename v1, typename v2>
01039           using add_t = typename add<v1, v2>::type;
01040
01044           template<typename v1, typename v2>
01045           using sub_t = typename sub<v1, v2>::type;
01046
01050           template<typename v1, typename v2>
01051           using mul_t = typename mul<v1, v2>::type;
01052
01056           template<typename v1, typename v2>
01057           using div_t = typename div<v1, v2>::type;
01058
01062           template<typename v1, typename v2>
01063           using mod_t = typename remainder<v1, v2>::type;
01064
01068           template<typename v1, typename v2>
01069           using gt_t = typename gt<v1, v2>::type;
01070
01074           template<typename v1, typename v2>
01075           static constexpr bool gt_v = gt_t<v1, v2>::value;
01076
01080           template<typename v1, typename v2>
01081           using lt_t = typename lt<v1, v2>::type;
01082
01086           template<typename v1, typename v2>
01087           static constexpr bool lt_v = lt_t<v1, v2>::value;
01088
01092           template<typename v1, typename v2>
01093           using eq_t = typename eq<v1, v2>::type;
01094
01098           template<typename v1, typename v2>
01099           static constexpr bool eq_v = eq_t<v1, v2>::value;
01100
01104           template<typename v1, typename v2>
01105           using gcd_t = gcd_t<i32, v1, v2>;
01106
01109           template<typename v1>
01110           using pos_t = typename pos<v1>::type;
01111
```

```
01114         template<typename v>
01115         static constexpr bool pos_v = pos_t<v>::value;
01116     };
01117 }  // namespace aerobus
01118
01119 // polynomial
01120 namespace aerobus {
01121     // coeffN x^N + ...
01126     template<typename Ring>
01127     requires IsEuclideanDomain<Ring>
01128     struct polynomial {
01129         static constexpr bool is_field = false;
01130         static constexpr bool is_euclidean_domain = Ring::is_euclidean_domain;
01131
01135         template<typename coeffN, typename... coeffs>
01136         struct val {
01138             using enclosing_type = polynomial<Ring>;
01140             static constexpr size_t degree = sizeof...(coeffs);
01142             using aN = coeffN;
01144             using strip = val<coeffs...>;
01146             using is_zero_t = std::bool_constant<(degree == 0) && (aN::is_zero_t::value)>;
01148             static constexpr bool is_zero_v = is_zero_t::value;
01149
01150          private:
01151             template<size_t index, typename E = void>
01152             struct coeff_at {};
01153
01154             template<size_t index>
01155             struct coeff_at<index, std::enable_if_t<(index >= 0 && index <= sizeof...(coeffs))>> {
01156                 using type = internal::type_at_t<sizeof...(coeffs) - index, coeffN, coeffs...>;
01157             };
01158
01159             template<size_t index>
01160             struct coeff_at<index, std::enable_if_t<(index < 0 || index > sizeof...(coeffs))>> {
01161                 using type = typename Ring::zero;
01162             };
01163
01164          public:
01167             template<size_t index>
01168             using coeff_at_t = typename coeff_at<index>::type;
01169
01172             static std::string to_string() {
01173                 return string_helper<coeffN, coeffs...>::func();
01174             }
01175
01180             template<typename valueRing>
01181             static constexpr valueRing eval(const valueRing& x) {
01182                 return horner_evaluation<valueRing, val>
01183                         ::template inner<0, degree + 1>
01184                         ::func(static_cast<valueRing>(0), x);
01185             }
01186         };
01187
01190         template<typename coeffN>
01191         struct val<coeffN> {
01193             using enclosing_type = polynomial<Ring>;
01195             static constexpr size_t degree = 0;
01196             using aN = coeffN;
01197             using strip = val<coeffN>;
01198             using is_zero_t = std::bool_constant<aN::is_zero_t::value>;
01199
01200             static constexpr bool is_zero_v = is_zero_t::value;
01201
01202             template<size_t index, typename E = void>
01203             struct coeff_at {};
01204
01205             template<size_t index>
01206             struct coeff_at<index, std::enable_if_t<(index == 0)>> {
01207                 using type = aN;
01208             };
01209
01210             template<size_t index>
01211             struct coeff_at<index, std::enable_if_t<(index < 0 || index > 0)>> {
01212                 using type = typename Ring::zero;
01213             };
01214
01215             template<size_t index>
01216             using coeff_at_t = typename coeff_at<index>::type;
01217
01218             static std::string to_string() {
01219                 return string_helper<coeffN>::func();
01220             }
01221
01222             template<typename valueRing>
01223             static constexpr valueRing eval(const valueRing& x) {
01224                 return static_cast<valueRing>(aN::template get<valueRing>());
01225             }
```

```
01226         };
01227
01229         using zero = val<typename Ring::zero>;
01231         using one = val<typename Ring::one>;
01233         using X = val<typename Ring::one, typename Ring::zero>;
01234
01235     private:
01236         template<typename P, typename E = void>
01237         struct simplify;
01238
01239         template <typename P1, typename P2, typename I>
01240         struct add_low;
01241
01242         template<typename P1, typename P2>
01243         struct add {
01244             using type = typename simplify<typename add_low<
01245             P1,
01246             P2,
01247             internal::make_index_sequence_reverse<
01248             std::max(P1::degree, P2::degree) + 1
01249             »::type>::type;
01250         };
01251
01252         template <typename P1, typename P2, typename I>
01253         struct sub_low;
01254
01255         template <typename P1, typename P2, typename I>
01256         struct mul_low;
01257
01258         template<typename v1, typename v2>
01259         struct mul {
01260                 using type = typename mul_low<
01261                     v1,
01262                     v2,
01263                     internal::make_index_sequence_reverse<
01264                     v1::degree + v2::degree + 1
01265                     »::type;
01266         };
01267
01268         template<typename coeff, size_t deg>
01269         struct monomial;
01270
01271         template<typename v, typename E = void>
01272         struct derive_helper {};
01273
01274         template<typename v>
01275         struct derive_helper<v, std::enable_if_t<v::degree == 0» {
01276             using type = zero;
01277         };
01278
01279         template<typename v>
01280         struct derive_helper<v, std::enable_if_t<v::degree != 0» {
01281             using type = typename add<
01282                 typename derive_helper<typename simplify<typename v::strip>::type>::type,
01283                 typename monomial<
01284                     typename Ring::template mul_t<
01285                         typename v::aN,
01286                         typename Ring::template inject_constant_t<(v::degree)>
01287                     >,
01288                     v::degree - 1
01289                 >::type
01290             >::type;
01291         };
01292
01293         template<typename v1, typename v2, typename E = void>
01294         struct eq_helper {};
01295
01296         template<typename v1, typename v2>
01297         struct eq_helper<v1, v2, std::enable_if_t<v1::degree != v2::degree» {
01298             using type = std::false_type;
01299         };
01300
01301
01302         template<typename v1, typename v2>
01303         struct eq_helper<v1, v2, std::enable_if_t<
01304             v1::degree == v2::degree &&
01305             (v1::degree != 0 || v2::degree != 0) &&
01306             std::is_same<
01307             typename Ring::template eq_t<typename v1::aN, typename v2::aN>,
01308             std::false_type
01309             >::value
01310         >
01311         > {
01312             using type = std::false_type;
01313         };
01314
01315         template<typename v1, typename v2>
```

```
01316         struct eq_helper<v1, v2, std::enable_if_t<
01317             v1::degree == v2::degree &&
01318             (v1::degree != 0 || v2::degree != 0) &&
01319             std::is_same<
01320             typename Ring::template eq_t<typename v1::aN, typename v2::aN>,
01321             std::true_type
01322             >::value
01323         » {
01324             using type = typename eq_helper<typename v1::strip, typename v2::strip>::type;
01325         };
01326
01327         template<typename v1, typename v2>
01328         struct eq_helper<v1, v2, std::enable_if_t<
01329             v1::degree == v2::degree &&
01330             (v1::degree == 0)
01331         » {
01332             using type = typename Ring::template eq_t<typename v1::aN, typename v2::aN>;
01333         };
01334
01335         template<typename v1, typename v2, typename E = void>
01336         struct lt_helper {};
01337
01338         template<typename v1, typename v2>
01339         struct lt_helper<v1, v2, std::enable_if_t<(v1::degree < v2::degree)» {
01340             using type = std::true_type;
01341         };
01342
01343         template<typename v1, typename v2>
01344         struct lt_helper<v1, v2, std::enable_if_t<(v1::degree == v2::degree)» {
01345             using type = typename Ring::template lt_t<typename v1::aN, typename v2::aN>;
01346         };
01347
01348         template<typename v1, typename v2>
01349         struct lt_helper<v1, v2, std::enable_if_t<(v1::degree > v2::degree)» {
01350             using type = std::false_type;
01351         };
01352
01353         template<typename v1, typename v2, typename E = void>
01354         struct gt_helper {};
01355
01356         template<typename v1, typename v2>
01357         struct gt_helper<v1, v2, std::enable_if_t<(v1::degree > v2::degree)» {
01358             using type = std::true_type;
01359         };
01360
01361         template<typename v1, typename v2>
01362         struct gt_helper<v1, v2, std::enable_if_t<(v1::degree == v2::degree)» {
01363             using type = std::false_type;
01364         };
01365
01366         template<typename v1, typename v2>
01367         struct gt_helper<v1, v2, std::enable_if_t<(v1::degree < v2::degree)» {
01368             using type = std::false_type;
01369         };
01370
01371         // when high power is zero : strip
01372         template<typename P>
01373         struct simplify<P, std::enable_if_t<
01374             std::is_same<
01375             typename Ring::zero,
01376             typename P::aN
01377             >::value && (P::degree > 0)
01378         » {
01379             using type = typename simplify<typename P::strip>::type;
01380         };
01381
01382         // otherwise : do nothing
01383         template<typename P>
01384         struct simplify<P, std::enable_if_t<
01385             !std::is_same<
01386             typename Ring::zero,
01387             typename P::aN
01388             >::value && (P::degree > 0)
01389         » {
01390             using type = P;
01391         };
01392
01393         // do not simplify constants
01394         template<typename P>
01395         struct simplify<P, std::enable_if_t<P::degree == 0» {
01396             using type = P;
01397         };
01398
01399         // addition at
01400         template<typename P1, typename P2, size_t index>
01401         struct add_at {
01402             using type =
```

```
01403                 typename Ring::template add_t<
01404                     typename P1::template coeff_at_t<index>,
01405                     typename P2::template coeff_at_t<index>>;
01406         };
01407
01408         template<typename P1, typename P2, size_t index>
01409         using add_at_t = typename add_at<P1, P2, index>::type;
01410
01411         template<typename P1, typename P2, std::size_t... I>
01412         struct add_low<P1, P2, std::index_sequence<I...>> {
01413             using type = val<add_at_t<P1, P2, I>...>;
01414         };
01415
01416         // substraction at
01417         template<typename P1, typename P2, size_t index>
01418         struct sub_at {
01419             using type =
01420                 typename Ring::template sub_t<
01421                     typename P1::template coeff_at_t<index>,
01422                     typename P2::template coeff_at_t<index>>;
01423         };
01424
01425         template<typename P1, typename P2, size_t index>
01426         using sub_at_t = typename sub_at<P1, P2, index>::type;
01427
01428         template<typename P1, typename P2, std::size_t... I>
01429         struct sub_low<P1, P2, std::index_sequence<I...>> {
01430             using type = val<sub_at_t<P1, P2, I>...>;
01431         };
01432
01433         template<typename P1, typename P2>
01434         struct sub {
01435             using type = typename simplify<typename sub_low<
01436             P1,
01437             P2,
01438             internal::make_index_sequence_reverse<
01439             std::max(P1::degree, P2::degree) + 1
01440             >::type>::type;
01441         };
01442
01443         // multiplication at
01444         template<typename v1, typename v2, size_t k, size_t index, size_t stop>
01445         struct mul_at_loop_helper {
01446             using type = typename Ring::template add_t<
01447                 typename Ring::template mul_t<
01448                 typename v1::template coeff_at_t<index>,
01449                 typename v2::template coeff_at_t<k - index>
01450                 >,
01451                 typename mul_at_loop_helper<v1, v2, k, index + 1, stop>::type
01452             >;
01453         };
01454
01455         template<typename v1, typename v2, size_t k, size_t stop>
01456         struct mul_at_loop_helper<v1, v2, k, stop, stop> {
01457             using type = typename Ring::template mul_t<
01458                 typename v1::template coeff_at_t<stop>,
01459                 typename v2::template coeff_at_t<0>>;
01460         };
01461
01462         template <typename v1, typename v2, size_t k, typename E = void>
01463         struct mul_at {};
01464
01465         template<typename v1, typename v2, size_t k>
01466         struct mul_at<v1, v2, k, std::enable_if_t<(k < 0) || (k > v1::degree + v2::degree)>> {
01467             using type = typename Ring::zero;
01468         };
01469
01470         template<typename v1, typename v2, size_t k>
01471         struct mul_at<v1, v2, k, std::enable_if_t<(k >= 0) && (k <= v1::degree + v2::degree)>> {
01472             using type = typename mul_at_loop_helper<v1, v2, k, 0, k>::type;
01473         };
01474
01475         template<typename P1, typename P2, size_t index>
01476         using mul_at_t = typename mul_at<P1, P2, index>::type;
01477
01478         template<typename P1, typename P2, std::size_t... I>
01479         struct mul_low<P1, P2, std::index_sequence<I...>> {
01480             using type = val<mul_at_t<P1, P2, I>...>;
01481         };
01482
01483         // division helper
01484         template< typename A, typename B, typename Q, typename R, typename E = void>
01485         struct div_helper {};
01486
01487         template<typename A, typename B, typename Q, typename R>
01488         struct div_helper<A, B, Q, R, std::enable_if_t<
01489             (R::degree < B::degree) ||
```

```
01490             (R::degree == 0 && std::is_same<typename R::aN, typename Ring::zero>::value)» {
01491             using q_type = Q;
01492             using mod_type = R;
01493             using gcd_type = B;
01494         };
01495
01496         template<typename A, typename B, typename Q, typename R>
01497         struct div_helper<A, B, Q, R, std::enable_if_t<
01498             (R::degree >= B::degree) &&
01499             !(R::degree == 0 && std::is_same<typename R::aN, typename Ring::zero>::value)» {
01500          private: // NOLINT
01501             using rN = typename R::aN;
01502             using bN = typename B::aN;
01503             using pT = typename monomial<typename Ring::template div_t<rN, bN>, R::degree -
      B::degree>::type;
01504             using rr = typename sub<R, typename mul<pT, B>::type>::type;
01505             using qq = typename add<Q, pT>::type;
01506
01507          public:
01508             using q_type = typename div_helper<A, B, qq, rr>::q_type;
01509             using mod_type = typename div_helper<A, B, qq, rr>::mod_type;
01510             using gcd_type = rr;
01511         };
01512
01513         template<typename A, typename B>
01514         struct div {
01515             static_assert(Ring::is_euclidean_domain, "cannot divide in that type of Ring");
01516             using q_type = typename div_helper<A, B, zero, A>::q_type;
01517             using m_type = typename div_helper<A, B, zero, A>::mod_type;
01518         };
01519
01520         template<typename P>
01521         struct make_unit {
01522             using type = typename div<P, val<typename P::aN>>::q_type;
01523         };
01524
01525         template<typename coeff, size_t deg>
01526         struct monomial {
01527             using type = typename mul<X, typename monomial<coeff, deg - 1>::type>::type;
01528         };
01529
01530         template<typename coeff>
01531         struct monomial<coeff, 0> {
01532             using type = val<coeff>;
01533         };
01534
01535         template<typename valueRing, typename P>
01536         struct horner_evaluation {
01537             template<size_t index, size_t stop>
01538             struct inner {
01539                 static constexpr valueRing func(const valueRing& accum, const valueRing& x) {
01540                     constexpr valueRing coeff =
01541                         static_cast<valueRing>(P::template coeff_at_t<P::degree - index>::template
      get<valueRing>());
01542                     return horner_evaluation<valueRing, P>::template inner<index + 1, stop>::func(x *
      accum + coeff, x);
01543                 }
01544             };
01545
01546             template<size_t stop>
01547             struct inner<stop, stop> {
01548                 static constexpr valueRing func(const valueRing& accum, const valueRing& x) {
01549                     return accum;
01550                 }
01551             };
01552         };
01553
01554         template<typename coeff, typename... coeffs>
01555         struct string_helper {
01556             static std::string func() {
01557                 std::string tail = string_helper<coeffs...>::func();
01558                 std::string result = "";
01559                 if (Ring::template eq_t<coeff, typename Ring::zero>::value) {
01560                     return tail;
01561                 } else if (Ring::template eq_t<coeff, typename Ring::one>::value) {
01562                     if (sizeof...(coeffs) == 1) {
01563                         result += "x";
01564                     } else {
01565                         result += "x^" + std::to_string(sizeof...(coeffs));
01566                     }
01567                 } else {
01568                     if (sizeof...(coeffs) == 1) {
01569                         result += coeff::to_string() + " x";
01570                     } else {
01571                         result += coeff::to_string()
01572                                 + " x^" + std::to_string(sizeof...(coeffs));
01573                     }
```

```
01574                 }
01575
01576                 if (!tail.empty()) {
01577                     result += " + " + tail;
01578                 }
01579
01580                 return result;
01581             }
01582         };
01583
01584         template<typename coeff>
01585         struct string_helper<coeff> {
01586             static std::string func() {
01587                 if (!std::is_same<coeff, typename Ring::zero>::value) {
01588                     return coeff::to_string();
01589                 } else {
01590                     return "";
01591                 }
01592             }
01593         };
01594
01595     public:
01598         template<typename P>
01599         using simplify_t = typename simplify<P>::type;
01600
01604         template<typename v1, typename v2>
01605         using add_t = typename add<v1, v2>::type;
01606
01610         template<typename v1, typename v2>
01611         using sub_t = typename sub<v1, v2>::type;
01612
01616         template<typename v1, typename v2>
01617         using mul_t = typename mul<v1, v2>::type;
01618
01622         template<typename v1, typename v2>
01623         using eq_t = typename eq_helper<v1, v2>::type;
01624
01628         template<typename v1, typename v2>
01629         using lt_t = typename lt_helper<v1, v2>::type;
01630
01634         template<typename v1, typename v2>
01635         using gt_t = typename gt_helper<v1, v2>::type;
01636
01640         template<typename v1, typename v2>
01641         using div_t = typename div<v1, v2>::q_type;
01642
01646         template<typename v1, typename v2>
01647         using mod_t = typename div_helper<v1, v2, zero, v1>::mod_type;
01648
01652         template<typename coeff, size_t deg>
01653         using monomial_t = typename monomial<coeff, deg>::type;
01654
01657         template<typename v>
01658         using derive_t = typename derive_helper<v>::type;
01659
01662         template<typename v>
01663         using pos_t = typename Ring::template pos_t<typename v::aN>;
01664
01667         template<typename v>
01668         static constexpr bool pos_v = pos_t<v>::value;
01669
01673         template<typename v1, typename v2>
01674         using gcd_t = std::conditional_t<
01675             Ring::is_euclidean_domain,
01676             typename make_unit<gcd_t<polynomial<Ring>, v1, v2>>::type,
01677             void>;
01678
01682         template<auto x>
01683         using inject_constant_t = val<typename Ring::template inject_constant_t<x>>;
01684
01688         template<typename v>
01689         using inject_ring_t = val<v>;
01690     };
01691 }  // namespace aerobus
01692
01693 // fraction field
01694 namespace aerobus {
01695     namespace internal {
01696         template<typename Ring, typename E = void>
01697         requires IsEuclideanDomain<Ring>
01698         struct _FractionField {};
01699
01700         template<typename Ring>
01701         requires IsEuclideanDomain<Ring>
01702         struct _FractionField<Ring, std::enable_if_t<Ring::is_euclidean_domain>> {
01704             static constexpr bool is_field = true;
01705             static constexpr bool is_euclidean_domain = true;
```

```
01706
01707           private:
01708               template<typename val1, typename val2, typename E = void>
01709               struct to_string_helper {};
01710
01711               template<typename val1, typename val2>
01712               struct to_string_helper <val1, val2,
01713                   std::enable_if_t<
01714                   Ring::template eq_t<
01715                   val2, typename Ring::one
01716                   >::value
01717                   >
01718               > {
01719                   static std::string func() {
01720                       return val1::to_string();
01721                   }
01722               };
01723
01724               template<typename val1, typename val2>
01725               struct to_string_helper<val1, val2,
01726                   std::enable_if_t<
01727                   !Ring::template eq_t<
01728                   val2,
01729                   typename Ring::one
01730                   >::value
01731                   >
01732               > {
01733                   static std::string func() {
01734                       return "(" + val1::to_string() + ") / (" + val2::to_string() + ")";
01735                   }
01736               };
01737
01738           public:
01742               template<typename val1, typename val2>
01743               struct val {
01745                   using x = val1;
01747                   using y = val2;
01749                   using is_zero_t = typename val1::is_zero_t;
01751                   static constexpr bool is_zero_v = val1::is_zero_t::value;
01752
01754                   using ring_type = Ring;
01755                   using enclosing_type = _FractionField<Ring>;
01756
01759                    static constexpr bool is_integer = std::is_same_v<val2, typename Ring::one>;
01760
01764                   template<typename valueType>
01765                   static constexpr valueType get() { return static_cast<valueType>(x::v) /
      static_cast<valueType>(y::v); }
01766
01769                   static std::string to_string() {
01770                       return to_string_helper<val1, val2>::func();
01771                   }
01772
01777                   template<typename valueRing>
01778                   static constexpr valueRing eval(const valueRing& v) {
01779                       return x::eval(v) / y::eval(v);
01780                   }
01781               };
01782
01784               using zero = val<typename Ring::zero, typename Ring::one>;
01786               using one = val<typename Ring::one, typename Ring::one>;
01787
01790               template<typename v>
01791               using inject_t = val<v, typename Ring::one>;
01792
01795               template<auto x>
01796               using inject_constant_t = val<typename Ring::template inject_constant_t<x>, typename
      Ring::one>;
01797
01800               template<typename v>
01801               using inject_ring_t = val<typename Ring::template inject_ring_t<v>, typename Ring::one>;
01802
01804               using ring_type = Ring;
01805
01806           private:
01807               template<typename v, typename E = void>
01808               struct simplify {};
01809
01810               // x = 0
01811               template<typename v>
01812               struct simplify<v, std::enable_if_t<v::x::is_zero_t::value» {
01813                   using type = typename _FractionField<Ring>::zero;
01814               };
01815
01816               // x != 0
01817               template<typename v>
01818               struct simplify<v, std::enable_if_t<!v::x::is_zero_t::value» {
```

```
01819             private:
01820                using _gcd = typename Ring::template gcd_t<typename v::x, typename v::y>;
01821                using newx = typename Ring::template div_t<typename v::x, _gcd>;
01822                using newy = typename Ring::template div_t<typename v::y, _gcd>;
01823
01824                using posx = std::conditional_t<
01825                                !Ring::template pos_v<newy>,
01826                                typename Ring::template sub_t<typename Ring::zero, newx>,
01827                                newx>;
01828                using posy = std::conditional_t<
01829                                !Ring::template pos_v<newy>,
01830                                typename Ring::template sub_t<typename Ring::zero, newy>,
01831                                newy>;
01832             public:
01833                using type = typename _FractionField<Ring>::template val<posx, posy>;
01834             };
01835
01836          public:
01839             template<typename v>
01840             using simplify_t = typename simplify<v>::type;
01841
01842          private:
01843             template<typename v1, typename v2>
01844             struct add {
01845              private:
01846                using a = typename Ring::template mul_t<typename v1::x, typename v2::y>;
01847                using b = typename Ring::template mul_t<typename v1::y, typename v2::x>;
01848                using dividend = typename Ring::template add_t<a, b>;
01849                using diviser = typename Ring::template mul_t<typename v1::y, typename v2::y>;
01850                using g = typename Ring::template gcd_t<dividend, diviser>;
01851
01852              public:
01853                using type = typename _FractionField<Ring>::template simplify_t<val<dividend,
     diviser»;
01854             };
01855
01856             template<typename v>
01857             struct pos {
01858                using type = std::conditional_t<
01859                    (Ring::template pos_v<typename v::x> && Ring::template pos_v<typename v::y>) ||
01860                    (!Ring::template pos_v<typename v::x> && !Ring::template pos_v<typename v::y>),
01861                    std::true_type,
01862                    std::false_type>;
01863             };
01864
01865             template<typename v1, typename v2>
01866             struct sub {
01867              private:
01868                using a = typename Ring::template mul_t<typename v1::x, typename v2::y>;
01869                using b = typename Ring::template mul_t<typename v1::y, typename v2::x>;
01870                using dividend = typename Ring::template sub_t<a, b>;
01871                using diviser = typename Ring::template mul_t<typename v1::y, typename v2::y>;
01872                using g = typename Ring::template gcd_t<dividend, diviser>;
01873
01874              public:
01875                using type = typename _FractionField<Ring>::template simplify_t<val<dividend,
     diviser»;
01876             };
01877
01878             template<typename v1, typename v2>
01879             struct mul {
01880              private:
01881                using a = typename Ring::template mul_t<typename v1::x, typename v2::x>;
01882                using b = typename Ring::template mul_t<typename v1::y, typename v2::y>;
01883
01884              public:
01885                using type = typename _FractionField<Ring>::template simplify_t<val<a, b»;
01886             };
01887
01888             template<typename v1, typename v2, typename E = void>
01889             struct div {};
01890
01891             template<typename v1, typename v2>
01892             struct div<v1, v2, std::enable_if_t<!std::is_same<v2, typename
     _FractionField<Ring>::zero>::value»  {
01893              private:
01894                using a = typename Ring::template mul_t<typename v1::x, typename v2::y>;
01895                using b = typename Ring::template mul_t<typename v1::y, typename v2::x>;
01896
01897              public:
01898                using type = typename _FractionField<Ring>::template simplify_t<val<a, b»;
01899             };
01900
01901             template<typename v1, typename v2>
01902             struct div<v1, v2, std::enable_if_t<
01903                std::is_same<zero, v1>::value && std::is_same<v2, zero>::value»  {
01904                using type = one;
```

```
01905             };
01906
01907             template<typename v1, typename v2>
01908             struct eq {
01909                 using type = std::conditional_t<
01910                         std::is_same<typename simplify_t<v1>::x, typename simplify_t<v2>::x>::value &&
01911                         std::is_same<typename simplify_t<v1>::y, typename simplify_t<v2>::y>::value,
01912                     std::true_type,
01913                     std::false_type>;
01914             };
01915
01916             template<typename v1, typename v2, typename E = void>
01917             struct gt;
01918
01919             template<typename v1, typename v2>
01920             struct gt<v1, v2, std::enable_if_t<
01921                 (eq<v1, v2>::type::value)
01922                 » {
01923                 using type = std::false_type;
01924             };
01925
01926             template<typename v1, typename v2>
01927             struct gt<v1, v2, std::enable_if_t<
01928                 (!eq<v1, v2>::type::value) &&
01929                 (!pos<v1>::type::value) && (!pos<v2>::type::value)
01930                 » {
01931                 using type = typename gt<
01932                     typename sub<zero, v1>::type, typename sub<zero, v2>::type
01933                 >::type;
01934             };
01935
01936             template<typename v1, typename v2>
01937             struct gt<v1, v2, std::enable_if_t<
01938                 (!eq<v1, v2>::type::value) &&
01939                 (pos<v1>::type::value) && (!pos<v2>::type::value)
01940                 » {
01941                 using type = std::true_type;
01942             };
01943
01944             template<typename v1, typename v2>
01945             struct gt<v1, v2, std::enable_if_t<
01946                 (!eq<v1, v2>::type::value) &&
01947                 (!pos<v1>::type::value) && (pos<v2>::type::value)
01948                 » {
01949                 using type = std::false_type;
01950             };
01951
01952             template<typename v1, typename v2>
01953             struct gt<v1, v2, std::enable_if_t<
01954                 (!eq<v1, v2>::type::value) &&
01955                 (pos<v1>::type::value) && (pos<v2>::type::value)
01956                 » {
01957                 using type = typename Ring::template gt_t<
01958                     typename Ring::template mul_t<v1::x, v2::y>,
01959                     typename Ring::template mul_t<v2::y, v2::x>
01960                 >;
01961             };
01962
01963         public:
01968             template<typename v1, typename v2>
01969             using add_t = typename add<v1, v2>::type;
01970
01975             template<typename v1, typename v2>
01976             using mod_t = zero;
01977
01982             template<typename v1, typename v2>
01983             using gcd_t = v1;
01984
01988             template<typename v1, typename v2>
01989             using sub_t = typename sub<v1, v2>::type;
01990
01994             template<typename v1, typename v2>
01995             using mul_t = typename mul<v1, v2>::type;
01996
02000             template<typename v1, typename v2>
02001             using div_t = typename div<v1, v2>::type;
02002
02006             template<typename v1, typename v2>
02007             using eq_t = typename eq<v1, v2>::type;
02008
02012             template<typename v1, typename v2>
02013             static constexpr bool eq_v = eq<v1, v2>::type::value;
02014
02018             template<typename v1, typename v2>
02019             using gt_t = typename gt<v1, v2>::type;
02020
02024             template<typename v1, typename v2>
```

```
02025             static constexpr bool gt_v = gt<v1, v2>::type::value;
02026
02029             template<typename v1>
02030             using pos_t = typename pos<v1>::type;
02031
02034             template<typename v>
02035             static constexpr bool pos_v = pos_t<v>::value;
02036         };
02037
02038         template<typename Ring, typename E = void>
02039         requires IsEuclideanDomain<Ring>
02040         struct FractionFieldImpl {};
02041
02042         // fraction field of a field is the field itself
02043         template<typename Field>
02044         requires IsEuclideanDomain<Field>
02045         struct FractionFieldImpl<Field, std::enable_if_t<Field::is_field» {
02046             using type = Field;
02047             template<typename v>
02048             using inject_t = v;
02049         };
02050
02051         // fraction field of a ring is the actual fraction field
02052         template<typename Ring>
02053         requires IsEuclideanDomain<Ring>
02054         struct FractionFieldImpl<Ring, std::enable_if_t<!Ring::is_field» {
02055             using type = _FractionField<Ring>;
02056         };
02057     }  // namespace internal
02058
02062     template<typename Ring>
02063     requires IsEuclideanDomain<Ring>
02064     using FractionField = typename internal::FractionFieldImpl<Ring>::type;
02065 }  // namespace aerobus
02066
02067 // short names for common types
02068 namespace aerobus {
02071     using q32 = FractionField<i32>;
02074     using fpq32 = FractionField<polynomial<q32»;
02077     using q64 = FractionField<i64>;
02079     using pi64 = polynomial<i64>;
02081     using pq64 = polynomial<q64>;
02083     using fpq64 = FractionField<polynomial<q64»;
02088     template<typename Ring, typename v1, typename v2>
02089     using makefraction_t = typename FractionField<Ring>::template val<v1, v2>;
02090
02094     template<int64_t p, int64_t q>
02095     using make_q64_t = typename q64::template simplify_t<
02096                 typename q64::val<i64::inject_constant_t<p>, i64::inject_constant_t<q»>;
02097
02101     template<int32_t p, int32_t q>
02102     using make_q32_t = typename q32::template simplify_t<
02103                 typename q32::val<i32::inject_constant_t<p>, i32::inject_constant_t<q»>;
02104
02109     template<typename Ring, typename v1, typename v2>
02110     using addfractions_t = typename FractionField<Ring>::template add_t<v1, v2>;
02115     template<typename Ring, typename v1, typename v2>
02116     using mulfractions_t = typename FractionField<Ring>::template mul_t<v1, v2>;
02117 }  // namespace aerobus
02118
02119 // taylor series and common integers (factorial, bernoulli...) appearing in taylor coefficients
02120 namespace aerobus {
02121     namespace internal {
02122         template<typename T, size_t x, typename E = void>
02123         struct factorial {};
02124
02125         template<typename T, size_t x>
02126         struct factorial<T, x, std::enable_if_t<(x > 0)» {
02127         private:
02128             template<typename, size_t, typename>
02129             friend struct factorial;
02130         public:
02131             using type = typename T::template mul_t<typename T::template val<x>, typename factorial<T,
      x - 1>::type>;
02132             static constexpr typename T::inner_type value = type::template get<typename
      T::inner_type>();
02133         };
02134
02135         template<typename T>
02136         struct factorial<T, 0> {
02137          public:
02138             using type = typename T::one;
02139             static constexpr typename T::inner_type value = type::template get<typename
      T::inner_type>();
02140         };
02141     }  // namespace internal
02142
```

```
02146     template<typename T, size_t i>
02147     using factorial_t = typename internal::factorial<T, i>::type;
02148
02152     template<typename T, size_t i>
02153     inline constexpr typename T::inner_type factorial_v = internal::factorial<T, i>::value;
02154
02155     namespace internal {
02156         template<typename T, size_t k, size_t n, typename E = void>
02157         struct combination_helper {};
02158
02159         template<typename T, size_t k, size_t n>
02160         struct combination_helper<T, k, n, std::enable_if_t<(n >= 0 && k <= (n / 2) && k > 0)>> {
02161             using type = typename FractionField<T>::template mul_t<
02162                 typename combination_helper<T, k - 1, n - 1>::type,
02163                 makefraction_t<T, typename T::template val<n>, typename T::template val<k>>;
02164         };
02165
02166         template<typename T, size_t k, size_t n>
02167         struct combination_helper<T, k, n, std::enable_if_t<(n >= 0 && k > (n / 2) && k > 0)>> {
02168             using type = typename combination_helper<T, n - k, n>::type;
02169         };
02170
02171         template<typename T, size_t n>
02172         struct combination_helper<T, 0, n> {
02173             using type = typename FractionField<T>::one;
02174         };
02175
02176         template<typename T, size_t k, size_t n>
02177         struct combination {
02178             using type = typename internal::combination_helper<T, k, n>::type::x;
02179             static constexpr typename T::inner_type value =
02180                         internal::combination_helper<T, k, n>::type::template get<typename
      T::inner_type>();
02181         };
02182     }  // namespace internal
02183
02186     template<typename T, size_t k, size_t n>
02187     using combination_t = typename internal::combination<T, k, n>::type;
02188
02193     template<typename T, size_t k, size_t n>
02194     inline constexpr typename T::inner_type combination_v = internal::combination<T, k, n>::value;
02195
02196     namespace internal {
02197         template<typename T, size_t m>
02198         struct bernoulli;
02199
02200         template<typename T, typename accum, size_t k, size_t m>
02201         struct bernoulli_helper {
02202             using type = typename bernoulli_helper<
02203                 T,
02204                 addfractions_t<T,
02205                     accum,
02206                     mulfractions_t<T,
02207                         makefraction_t<T,
02208                             combination_t<T, k, m + 1>,
02209                             typename T::one>,
02210                         typename bernoulli<T, k>::type
02211                     >
02212                 >,
02213                 k + 1,
02214                 m>::type;
02215         };
02216
02217         template<typename T, typename accum, size_t m>
02218         struct bernoulli_helper<T, accum, m, m> {
02219             using type = accum;
02220         };
02221
02222
02223
02224         template<typename T, size_t m>
02225         struct bernoulli {
02226             using type = typename FractionField<T>::template mul_t<
02227                 typename internal::bernoulli_helper<T, typename FractionField<T>::zero, 0, m>::type,
02228                 makefraction_t<T,
02229                 typename T::template val<static_cast<typename T::inner_type>(-1)>,
02230                 typename T::template val<static_cast<typename T::inner_type>(m + 1)>
02231                 >
02232             >;
02233
02234             template<typename floatType>
02235             static constexpr floatType value = type::template get<floatType>();
02236         };
02237
02238         template<typename T>
02239         struct bernoulli<T, 0> {
02240             using type = typename FractionField<T>::one;
```

```
02241
02242             template<typename floatType>
02243             static constexpr floatType value = type::template get<floatType>();
02244         };
02245     }  // namespace internal
02246
02250     template<typename T, size_t n>
02251     using bernoulli_t = typename internal::bernoulli<T, n>::type;
02252
02257     template<typename FloatType, typename T, size_t n >
02258     inline constexpr FloatType bernoulli_v = internal::bernoulli<T, n>::template value<FloatType>;
02259
02260     namespace internal {
02261         template<typename T, int k, typename E = void>
02262         struct alternate {};
02263
02264         template<typename T, int k>
02265         struct alternate<T, k, std::enable_if_t<k % 2 == 0» {
02266             using type = typename T::one;
02267             static constexpr typename T::inner_type value = type::template get<typename
      T::inner_type>();
02268         };
02269
02270         template<typename T, int k>
02271         struct alternate<T, k, std::enable_if_t<k % 2 != 0» {
02272             using type = typename T::template sub_t<typename T::zero, typename T::one>;
02273             static constexpr typename T::inner_type value = type::template get<typename
      T::inner_type>();
02274         };
02275     }  // namespace internal
02276
02279     template<typename T, int k>
02280     using alternate_t = typename internal::alternate<T, k>::type;
02281
02282     namespace internal {
02283         template<typename T, int n, int k, typename E = void>
02284         struct stirling_helper {};
02285
02286         template<typename T>
02287         struct stirling_helper<T, 0, 0> {
02288             using type = typename T::one;
02289         };
02290
02291         template<typename T, int n>
02292         struct stirling_helper<T, n, 0, std::enable_if_t<(n > 0)» {
02293             using type = typename T::zero;
02294         };
02295
02296         template<typename T, int n>
02297         struct stirling_helper<T, 0, n, std::enable_if_t<(n > 0)» {
02298             using type = typename T::zero;
02299         };
02300
02301         template<typename T, int n, int k>
02302         struct stirling_helper<T, n, k, std::enable_if_t<(k > 0) && (n > 0)» {
02303             using type = typename T::template sub_t<
02304                             typename stirling_helper<T, n-1, k-1>::type,
02305                             typename T::template mul_t<
02306                                 typename T::template inject_constant_t<n-1>,
02307                                 typename stirling_helper<T, n-1, k>::type
02308                             »;
02309         };
02310     }  // namespace internal
02311
02316     template<typename T, int n, int k>
02317     using stirling_signed_t = typename internal::stirling_helper<T, n, k>::type;
02318
02323     template<typename T, int n, int k>
02324     using stirling_unsigned_t = abs_t<typename internal::stirling_helper<T, n, k>::type>;
02325
02330     template<typename T, int n, int k>
02331     static constexpr typename T::inner_type stirling_signed_v = stirling_signed_t<T, n, k>::v;
02332
02333
02338     template<typename T, int n, int k>
02339     static constexpr typename T::inner_type stirling_unsigned_v = stirling_unsigned_t<T, n, k>::v;
02340
02343     template<typename T, size_t k>
02344     inline constexpr typename T::inner_type alternate_v = internal::alternate<T, k>::value;
02345
02346     namespace internal {
02347         template<typename T, auto p, auto n, typename E = void>
02348         struct pow {};
02349
02350         template<typename T, auto p, auto n>
02351         struct pow<T, p, n, std::enable_if_t<(n > 0 && n % 2 == 0)» {
02352             using type = typename T::template mul_t<
```

```
02353                 typename pow<T, p, n/2>::type,
02354                 typename pow<T, p, n/2>::type
02355             >;
02356         };
02357 
02358         template<typename T, auto p, auto n>
02359         struct pow<T, p, n, std::enable_if_t<(n % 2 == 1)>> {
02360             using type = typename T::template mul_t<
02361                 typename T::template inject_constant_t<p>,
02362                 typename T::template mul_t<
02363                     typename pow<T, p, n/2>::type,
02364                     typename pow<T, p, n/2>::type
02365                 >
02366             >;
02367         };
02368 
02369         template<typename T, auto p>
02370         struct pow<T, p, 0> { using type = typename T::one; };
02371     }  // namespace internal
02372 
02377     template<typename T, auto p, auto n>
02378     using pow_t = typename internal::pow<T, p, n>::type;
02379 
02384     template<typename T, auto p, auto n>
02385     static constexpr typename T::inner_type pow_v = internal::pow<T, p, n>::type::v;
02386 
02387     namespace internal {
02388         template<typename, template<typename, size_t> typename, class>
02389         struct make_taylor_impl;
02390 
02391         template<typename T, template<typename, size_t> typename coeff_at, size_t... Is>
02392         struct make_taylor_impl<T, coeff_at, std::integer_sequence<size_t, Is...>> {
02393             using type = typename polynomial<FractionField<T>>::template val<typename coeff_at<T,
    Is>::type...>;
02394         };
02395     }
02396 
02401     template<typename T, template<typename, size_t index> typename coeff_at, size_t deg>
02402     using taylor = typename internal::make_taylor_impl<
02403         T,
02404         coeff_at,
02405         internal::make_index_sequence_reverse<deg + 1>::type;
02406 
02407     namespace internal {
02408         template<typename T, size_t i>
02409         struct exp_coeff {
02410             using type = makefraction_t<T, typename T::one, factorial_t<T, i>>;
02411         };
02412 
02413         template<typename T, size_t i, typename E = void>
02414         struct sin_coeff_helper {};
02415 
02416         template<typename T, size_t i>
02417         struct sin_coeff_helper<T, i, std::enable_if_t<(i & 1) == 0>> {
02418             using type = typename FractionField<T>::zero;
02419         };
02420 
02421         template<typename T, size_t i>
02422         struct sin_coeff_helper<T, i, std::enable_if_t<(i & 1) == 1>> {
02423             using type = makefraction_t<T, alternate_t<T, i / 2>, factorial_t<T, i>>;
02424         };
02425 
02426         template<typename T, size_t i>
02427         struct sin_coeff {
02428             using type = typename sin_coeff_helper<T, i>::type;
02429         };
02430 
02431         template<typename T, size_t i, typename E = void>
02432         struct sh_coeff_helper {};
02433 
02434         template<typename T, size_t i>
02435         struct sh_coeff_helper<T, i, std::enable_if_t<(i & 1) == 0>> {
02436             using type = typename FractionField<T>::zero;
02437         };
02438 
02439         template<typename T, size_t i>
02440         struct sh_coeff_helper<T, i, std::enable_if_t<(i & 1) == 1>> {
02441             using type = makefraction_t<T, typename T::one, factorial_t<T, i>>;
02442         };
02443 
02444         template<typename T, size_t i>
02445         struct sh_coeff {
02446             using type = typename sh_coeff_helper<T, i>::type;
02447         };
02448 
02449         template<typename T, size_t i, typename E = void>
02450         struct cos_coeff_helper {};
```

```
02451
02452         template<typename T, size_t i>
02453         struct cos_coeff_helper<T, i, std::enable_if_t<(i & 1) == 1>> {
02454             using type = typename FractionField<T>::zero;
02455         };
02456
02457         template<typename T, size_t i>
02458         struct cos_coeff_helper<T, i, std::enable_if_t<(i & 1) == 0>> {
02459             using type = makefraction_t<T, alternate_t<T, i / 2>, factorial_t<T, i>>;
02460         };
02461
02462         template<typename T, size_t i>
02463         struct cos_coeff {
02464             using type = typename cos_coeff_helper<T, i>::type;
02465         };
02466
02467         template<typename T, size_t i, typename E = void>
02468         struct cosh_coeff_helper {};
02469
02470         template<typename T, size_t i>
02471         struct cosh_coeff_helper<T, i, std::enable_if_t<(i & 1) == 1>> {
02472             using type = typename FractionField<T>::zero;
02473         };
02474
02475         template<typename T, size_t i>
02476         struct cosh_coeff_helper<T, i, std::enable_if_t<(i & 1) == 0>> {
02477             using type = makefraction_t<T, typename T::one, factorial_t<T, i>>;
02478         };
02479
02480         template<typename T, size_t i>
02481         struct cosh_coeff {
02482             using type = typename cosh_coeff_helper<T, i>::type;
02483         };
02484
02485         template<typename T, size_t i>
02486         struct geom_coeff { using type = typename FractionField<T>::one; };
02487
02488
02489         template<typename T, size_t i, typename E = void>
02490         struct atan_coeff_helper;
02491
02492         template<typename T, size_t i>
02493         struct atan_coeff_helper<T, i, std::enable_if_t<(i & 1) == 1>> {
02494             using type = makefraction_t<T, alternate_t<T, i / 2>, typename T::template val<i>;
02495         };
02496
02497         template<typename T, size_t i>
02498         struct atan_coeff_helper<T, i, std::enable_if_t<(i & 1) == 0>> {
02499             using type = typename FractionField<T>::zero;
02500         };
02501
02502         template<typename T, size_t i>
02503         struct atan_coeff { using type = typename atan_coeff_helper<T, i>::type; };
02504
02505         template<typename T, size_t i, typename E = void>
02506         struct asin_coeff_helper;
02507
02508         template<typename T, size_t i>
02509         struct asin_coeff_helper<T, i, std::enable_if_t<(i & 1) == 1>> {
02510             using type = makefraction_t<T,
02511                 factorial_t<T, i - 1>,
02512                 typename T::template mul_t<
02513                     typename T::template val<i>,
02514                     T::template mul_t<
02515                         pow_t<T, 4, i / 2>,
02516                         pow<T, factorial<T, i / 2>::value, 2
02517                     >
02518                 >
02519                 >;
02520         };
02521
02522         template<typename T, size_t i>
02523         struct asin_coeff_helper<T, i, std::enable_if_t<(i & 1) == 0>> {
02524             using type = typename FractionField<T>::zero;
02525         };
02526
02527         template<typename T, size_t i>
02528         struct asin_coeff {
02529             using type = typename asin_coeff_helper<T, i>::type;
02530         };
02531
02532         template<typename T, size_t i>
02533         struct lnp1_coeff {
02534             using type = makefraction_t<T,
02535                 alternate_t<T, i + 1>,
02536                 typename T::template val<i>;
02537         };
```

```
02538
02539         template<typename T>
02540         struct lnp1_coeff<T, 0> { using type = typename FractionField<T>::zero; };
02541
02542         template<typename T, size_t i, typename E = void>
02543         struct asinh_coeff_helper;
02544
02545         template<typename T, size_t i>
02546         struct asinh_coeff_helper<T, i, std::enable_if_t<(i & 1) == 1>> {
02547             using type = makefraction_t<T,
02548                 typename T::template mul_t<
02549                     alternate_t<T, i / 2>,
02550                     factorial_t<T, i - 1>
02551                 >,
02552                 typename T::template mul_t<
02553                     T::template mul_t<
02554                         typename T::template val<i>,
02555                         pow_t<T, (factorial<T, i / 2>::value), 2>
02556                     >,
02557                     pow_t<T, 4, i / 2>
02558                 >
02559             >;
02560         };
02561
02562         template<typename T, size_t i>
02563         struct asinh_coeff_helper<T, i, std::enable_if_t<(i & 1) == 0>> {
02564             using type = typename FractionField<T>::zero;
02565         };
02566
02567         template<typename T, size_t i>
02568         struct asinh_coeff {
02569             using type = typename asinh_coeff_helper<T, i>::type;
02570         };
02571
02572         template<typename T, size_t i, typename E = void>
02573         struct atanh_coeff_helper;
02574
02575         template<typename T, size_t i>
02576         struct atanh_coeff_helper<T, i, std::enable_if_t<(i & 1) == 1>> {
02577             // 1/i
02578             using type = typename FractionField<T>:: template val<
02579                 typename T::one,
02580                 typename T::template val<static_cast<typename T::inner_type>(i)>>;
02581         };
02582
02583         template<typename T, size_t i>
02584         struct atanh_coeff_helper<T, i, std::enable_if_t<(i & 1) == 0>> {
02585             using type = typename FractionField<T>::zero;
02586         };
02587
02588         template<typename T, size_t i>
02589         struct atanh_coeff {
02590             using type = typename asinh_coeff_helper<T, i>::type;
02591         };
02592
02593         template<typename T, size_t i, typename E = void>
02594         struct tan_coeff_helper;
02595
02596         template<typename T, size_t i>
02597         struct tan_coeff_helper<T, i, std::enable_if_t<(i % 2) == 0>> {
02598             using type = typename FractionField<T>::zero;
02599         };
02600
02601         template<typename T, size_t i>
02602         struct tan_coeff_helper<T, i, std::enable_if_t<(i % 2) != 0>> {
02603         private:
02604             // 4^((i+1)/2)
02605             using _4p = typename FractionField<T>::template inject_t<pow_t<T, 4, (i + 1) / 2>>;
02606             // 4^((i+1)/2) - 1
02607             using _4pm1 = typename FractionField<T>::template sub_t<_4p, typename
      FractionField<T>::one>;
02608             // (-1)^((i-1)/2)
02609             using altp = typename FractionField<T>::template inject_t<alternate_t<T, (i - 1) / 2>>;
02610             using dividend = typename FractionField<T>::template mul_t<
02611                 altp,
02612                 FractionField<T>::template mul_t<
02613                 _4p,
02614                 FractionField<T>::template mul_t<
02615                 _4pm1,
02616                 bernoulli_t<T, (i + 1)>
02617                 >
02618                 >
02619             >;
02620         public:
02621             using type = typename FractionField<T>::template div_t<dividend,
02622                 typename FractionField<T>::template inject_t<factorial_t<T, i + 1>>>;
02623         };
```

```
02624
02625         template<typename T, size_t i>
02626         struct tan_coeff {
02627             using type = typename tan_coeff_helper<T, i>::type;
02628         };
02629
02630         template<typename T, size_t i, typename E = void>
02631         struct tanh_coeff_helper;
02632
02633         template<typename T, size_t i>
02634         struct tanh_coeff_helper<T, i, std::enable_if_t<(i % 2) == 0» {
02635             using type = typename FractionField<T>::zero;
02636         };
02637
02638         template<typename T, size_t i>
02639         struct tanh_coeff_helper<T, i, std::enable_if_t<(i % 2) != 0» {
02640         private:
02641             using _4p = typename FractionField<T>::template inject_t<pow_t<T, 4, (i + 1) / 2»;
02642             using _4pm1 = typename FractionField<T>::template sub_t<_4p, typename
      FractionField<T>::one>;
02643             using dividend =
02644                 typename FractionField<T>::template mul_t<
02645                     _4p,
02646                     typename FractionField<T>::template mul_t<
02647                         _4pm1,
02648                         bernoulli_t<T, (i + 1)»>::type;
02649         public:
02650             using type = typename FractionField<T>::template div_t<dividend,
02651                 FractionField<T>::template inject_t<factorial_t<T, i + 1»>;
02652         };
02653
02654         template<typename T, size_t i>
02655         struct tanh_coeff {
02656             using type = typename tanh_coeff_helper<T, i>::type;
02657         };
02658     }  // namespace internal
02659
02663     template<typename T, size_t deg>
02664     using exp = taylor<T, internal::exp_coeff, deg>;
02665
02669     template<typename T, size_t deg>
02670     using expm1 = typename polynomial<FractionField<T>>::template sub_t<
02671         exp<T, deg>,
02672         typename polynomial<FractionField<T>>::one>;
02673
02677     template<typename T, size_t deg>
02678     using lnp1 = taylor<T, internal::lnp1_coeff, deg>;
02679
02683     template<typename T, size_t deg>
02684     using atan = taylor<T, internal::atan_coeff, deg>;
02685
02689     template<typename T, size_t deg>
02690     using sin = taylor<T, internal::sin_coeff, deg>;
02691
02695     template<typename T, size_t deg>
02696     using sinh = taylor<T, internal::sh_coeff, deg>;
02697
02701     template<typename T, size_t deg>
02702     using cosh = taylor<T, internal::cosh_coeff, deg>;
02703
02707     template<typename T, size_t deg>
02708     using cos = taylor<T, internal::cos_coeff, deg>;
02709
02713     template<typename T, size_t deg>
02714     using geometric_sum = taylor<T, internal::geom_coeff, deg>;
02715
02719     template<typename T, size_t deg>
02720     using asin = taylor<T, internal::asin_coeff, deg>;
02721
02725     template<typename T, size_t deg>
02726     using asinh = taylor<T, internal::asinh_coeff, deg>;
02727
02731     template<typename T, size_t deg>
02732     using atanh = taylor<T, internal::atanh_coeff, deg>;
02733
02737     template<typename T, size_t deg>
02738     using tan = taylor<T, internal::tan_coeff, deg>;
02739
02743     template<typename T, size_t deg>
02744     using tanh = taylor<T, internal::tanh_coeff, deg>;
02745 }  // namespace aerobus
02746
02747 // continued fractions
02748 namespace aerobus {
02751     template<int64_t... values>
02752     struct ContinuedFraction {};
02753
```

```
02756     template<int64_t a0>
02757     struct ContinuedFraction<a0> {
02758         using type = typename q64::template inject_constant_t<a0>;
02759         static constexpr double val = type::template get<double>();
02760     };
02761
02765     template<int64_t a0, int64_t... rest>
02766     struct ContinuedFraction<a0, rest...> {
02767         using type = q64::template add_t<
02768                 typename q64::template inject_constant_t<a0>,
02769                 typename q64::template div_t<
02770                     typename q64::one,
02771                     typename ContinuedFraction<rest...>::type
02772                 »;
02773         static constexpr double val = type::template get<double>();
02774     };
02775
02780     using PI_fraction =
      ContinuedFraction<3, 7, 15, 1, 292, 1, 1, 1, 2, 1, 3, 1, 14, 2, 1, 1, 2, 2, 2, 2, 1>;
02783     using E_fraction =
      ContinuedFraction<2, 1, 2, 1, 1, 4, 1, 1, 6, 1, 1, 8, 1, 1, 10, 1, 1, 12, 1, 1, 14, 1, 1>;
02785     using SQRT2_fraction =
      ContinuedFraction<1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2>;
02787     using SQRT3_fraction =
      ContinuedFraction<1, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2>;
      // NOLINT
02788 }  // namespace aerobus
02789
02790 // known polynomials
02791 namespace aerobus {
02792     // CChebyshev
02793     namespace internal {
02794         template<int kind, size_t deg>
02795         struct chebyshev_helper {
02796             using type = typename pi64::template sub_t<
02797                 typename pi64::template mul_t<
02798                     typename pi64::template mul_t<
02799                         pi64::inject_constant_t<2>,
02800                         typename pi64::X>,
02801                     typename chebyshev_helper<kind, deg - 1>::type
02802                 >,
02803                 typename chebyshev_helper<kind, deg - 2>::type
02804             >;
02805         };
02806
02807         template<>
02808         struct chebyshev_helper<1, 0> {
02809             using type = typename pi64::one;
02810         };
02811
02812         template<>
02813         struct chebyshev_helper<1, 1> {
02814             using type = typename pi64::X;
02815         };
02816
02817         template<>
02818         struct chebyshev_helper<2, 0> {
02819             using type = typename pi64::one;
02820         };
02821
02822         template<>
02823         struct chebyshev_helper<2, 1> {
02824             using type = typename pi64::template mul_t<
02825                 typename pi64::inject_constant_t<2>,
02826                 typename pi64::X>;
02827         };
02828     }  // namespace internal
02829
02830     // Laguerre
02831     namespace internal {
02832         template<size_t deg>
02833         struct laguerre_helper {
02834          private:
02835             // Lk = (1 / k) * ((2 * k - 1 - x) * lkm1 - (k - 2)Lkm2)
02836             using lnm2 = typename laguerre_helper<deg - 2>::type;
02837             using lnm1 = typename laguerre_helper<deg - 1>::type;
02838             // -x + 2k-1
02839             using p = typename pq64::template val<
02840                 typename q64::template inject_constant_t<-1>,
02841                 typename q64::template inject_constant_t<2 * deg - 1»;
02842             // 1/n
02843             using factor = typename pq64::template inject_ring_t<
02844                 q64::val<typename i64::one, typename i64::template inject_constant_t<deg»>;
02845
02846          public:
02847             using type = typename pq64::template mul_t <
02848                 factor,
```

```
02849                 typename pq64::template sub_t<
02850                     typename pq64::template mul_t<
02851                         p,
02852                         lnm1
02853                     >,
02854                     typename pq64::template mul_t<
02855                         typename pq64::template inject_constant_t<deg-1>,
02856                         lnm2
02857                     >
02858                 >
02859             >;
02860 
02861         };
02862 
02863         template<>
02864         struct laguerre_helper<0> {
02865             using type = typename pq64::one;
02866         };
02867 
02868         template<>
02869         struct laguerre_helper<1> {
02870             using type = typename pq64::template sub_t<typename pq64::one, typename pq64::X>;
02871         };
02872     }  // namespace internal
02873 
02874     // Bernstein
02875     namespace internal {
02876         template<size_t i, size_t m, typename E = void>
02877         struct bernstein_helper {};
02878 
02879         template<>
02880         struct bernstein_helper<0, 0> {
02881             using type = typename pi64::one;
02882         };
02883 
02884         template<size_t i, size_t m>
02885         struct bernstein_helper<i, m, std::enable_if_t<
02886                     (m > 0) && (i == 0)» {
02887             using type = typename pi64::mul_t<
02888                     typename pi64::sub_t<typename pi64::one, typename pi64::X>,
02889                     typename bernstein_helper<i, m-1>::type>;
02890         };
02891 
02892         template<size_t i, size_t m>
02893         struct bernstein_helper<i, m, std::enable_if_t<
02894                     (m > 0) && (i == m)» {
02895             using type = typename pi64::template mul_t<
02896                     typename pi64::X,
02897                     typename bernstein_helper<i-1, m-1>::type>;
02898         };
02899 
02900         template<size_t i, size_t m>
02901         struct bernstein_helper<i, m, std::enable_if_t<
02902                     (m > 0) && (i > 0) && (i < m)» {
02903             using type = typename pi64::add_t<
02904                     typename pi64::mul_t<
02905                         typename pi64::sub_t<typename pi64::one, typename pi64::X>,
02906                         typename bernstein_helper<i, m-1>::type>,
02907                     typename pi64::mul_t<
02908                         typename pi64::X,
02909                         typename bernstein_helper<i-1, m-1>::type»;
02910         };
02911     }  // namespace internal
02912 
02913     namespace known_polynomials {
02915         enum hermite_kind {
02916             probabilist,
02917             physicist
02918         };
02919     }
02920 
02921     // hermite
02922     namespace internal {
02923         template<size_t deg, known_polynomials::hermite_kind kind>
02924         struct hermite_helper {};
02925 
02926         template<size_t deg>
02927         struct hermite_helper<deg, known_polynomials::hermite_kind::probabilist> {
02928          private:
02929             using hnm1 = typename hermite_helper<deg - 1,
      known_polynomials::hermite_kind::probabilist>::type;
02930             using hnm2 = typename hermite_helper<deg - 2,
      known_polynomials::hermite_kind::probabilist>::type;
02931 
02932          public:
02933             using type = typename pi64::template sub_t<
02934                 typename pi64::template mul_t<typename pi64::X, hnm1>,
```

```
02935                 typename pi64::template mul_t<
02936                     typename pi64::template inject_constant_t<deg - 1>,
02937                     hnm2
02938                 >
02939             >;
02940         };
02941 
02942         template<size_t deg>
02943         struct hermite_helper<deg, known_polynomials::hermite_kind::physicist> {
02944          private:
02945             using hnm1 = typename hermite_helper<deg - 1,
      known_polynomials::hermite_kind::physicist>::type;
02946             using hnm2 = typename hermite_helper<deg - 2,
      known_polynomials::hermite_kind::physicist>::type;
02947 
02948          public:
02949             using type = typename pi64::template sub_t<
02950                 // 2X Hn-1
02951                 typename pi64::template mul_t<
02952                     typename pi64::val<typename i64::template inject_constant_t<2>,
02953                     typename i64::zero>, hnm1>,
02954 
02955                 typename pi64::template mul_t<
02956                     typename pi64::template inject_constant_t<2*(deg - 1)>,
02957                     hnm2
02958                 >
02959             >;
02960         };
02961 
02962         template<>
02963         struct hermite_helper<0, known_polynomials::hermite_kind::probabilist> {
02964             using type = typename pi64::one;
02965         };
02966 
02967         template<>
02968         struct hermite_helper<1, known_polynomials::hermite_kind::probabilist> {
02969             using type = typename pi64::X;
02970         };
02971 
02972         template<>
02973         struct hermite_helper<0, known_polynomials::hermite_kind::physicist> {
02974             using type = typename pi64::one;
02975         };
02976 
02977         template<>
02978         struct hermite_helper<1, known_polynomials::hermite_kind::physicist> {
02979             // 2X
02980             using type = typename pi64::template val<typename i64::template inject_constant_t<2>,
      typename i64::zero>;
02981         };
02982     }  // namespace internal
02983 
02984     // legendre
02985     namespace internal {
02986         template<size_t n>
02987         struct legendre_helper {
02988          private:
02989             // 1/n constant
02990             // (2n-1)/n X
02991             using fact_left = typename pq64::monomial_t<make_q64_t<2*n-1, n>, 1>;
02992             // (n-1) / n
02993             using fact_right = typename pq64::val<make_q64_t<n-1, n»;
02994          public:
02995             using type = pq64::template sub_t<
02996                     typename pq64::template mul_t<
02997                         fact_left,
02998                         typename legendre_helper<n-1>::type
02999                     >,
03000                     typename pq64::template mul_t<
03001                         fact_right,
03002                         typename legendre_helper<n-2>::type
03003                     >
03004                 >;
03005         };
03006 
03007         template<>
03008         struct legendre_helper<0> {
03009             using type = typename pq64::one;
03010         };
03011 
03012         template<>
03013         struct legendre_helper<1> {
03014             using type = typename pq64::X;
03015         };
03016     }  // namespace internal
03017 
03018     // bernoulli polynomials
```

```
03019     namespace internal {
03020         template<size_t n>
03021         struct bernoulli_coeff {
03022             template<typename T, size_t i>
03023             struct inner {
03024                 using type = typename q64::template mul_t<
03025                     q64::inject_ring_t<combination_t<i64, i, n»,
03026                     bernoulli_t<i64, n-i>
03027                 >;
03028             };
03029         };
03030     }  // namespace internal
03031
03032     namespace known_polynomials {
03035         template <size_t deg>
03036         using chebyshev_T = typename internal::chebyshev_helper<1, deg>::type;
03037
03040         template <size_t deg>
03041         using chebyshev_U = typename internal::chebyshev_helper<2, deg>::type;
03042
03045         template <size_t deg>
03046         using laguerre = typename internal::laguerre_helper<deg>::type;
03047
03050         template <size_t deg>
03051         using hermite_prob = typename internal::hermite_helper<deg, hermite_kind::probabilist>::type;
03052
03055         template <size_t deg>
03056         using hermite_phys = typename internal::hermite_helper<deg, hermite_kind::physicist>::type;
03057
03061         template<size_t i, size_t m>
03062         using bernstein = typename internal::bernstein_helper<i, m>::type;
03063
03066         template<size_t deg>
03067         using legendre = typename internal::legendre_helper<deg>::type;
03068
03071         template<size_t deg>
03072         using bernoulli = taylor<i64, internal::bernoulli_coeff<deg>::template inner, deg>;
03073     }  // namespace known_polynomials
03074 }  // namespace aerobus
03075
03076
03077 #ifdef AEROBUS_CONWAY_IMPORTS
03078 template<int p, int n>
03079 struct ConwayPolynomial;
03080
03081 #define ZPZV ZPZ::template val
03082 #define POLYV aerobus::polynomial<ZPZ>::template val
03083 template<> struct ConwayPolynomial<2, 1> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<1»; };  // NOLINT
03084 template<> struct ConwayPolynomial<2, 2> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<1>, ZPZV<1»; }; // NOLINT
03085 template<> struct ConwayPolynomial<2, 3> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<1»; };  // NOLINT
03086 template<> struct ConwayPolynomial<2, 4> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1»; };  // NOLINT
03087 template<> struct ConwayPolynomial<2, 5> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<1»; };  // NOLINT
03088 template<> struct ConwayPolynomial<2, 6> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<1»; };  // NOLINT
03089 template<> struct ConwayPolynomial<2, 7> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1»; };  // NOLINT
03090 template<> struct ConwayPolynomial<2, 8> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<1>, ZPZV<0>, ZPZV<1»; };  // NOLINT
03091 template<> struct ConwayPolynomial<2, 9> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<1»; };  // NOLINT
03092 template<> struct ConwayPolynomial<2, 10> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<1>, ZPZV<1»; };  //
      NOLINT
03093 template<> struct ConwayPolynomial<2, 11> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<1»; };
      // NOLINT
03094 template<> struct ConwayPolynomial<2, 12> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<1>,
      ZPZV<1»; };  // NOLINT
03095 template<> struct ConwayPolynomial<2, 13> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<0>,
      ZPZV<1>, ZPZV<1»; };  // NOLINT
03096 template<> struct ConwayPolynomial<2, 14> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<1»; };  // NOLINT
03097 template<> struct ConwayPolynomial<2, 15> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<1»; };  // NOLINT
03098 template<> struct ConwayPolynomial<2, 16> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<0>, ZPZV<1»; };  // NOLINT
03099 template<> struct ConwayPolynomial<2, 17> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
```

```
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<1>»; };  // NOLINT
03100 template<> struct ConwayPolynomial<2, 18> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>»; };  // NOLINT
03101 template<> struct ConwayPolynomial<2, 19> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<1>»; };  // NOLINT
03102 template<> struct ConwayPolynomial<2, 20> { using ZPZ = aerobus::zpz<2>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<1>, ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>»; };  // NOLINT
03103 template<> struct ConwayPolynomial<3, 1> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<1>»; };  // NOLINT
03104 template<> struct ConwayPolynomial<3, 2> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<2>, ZPZV<2>»; };  // NOLINT
03105 template<> struct ConwayPolynomial<3, 3> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<1>»; };  // NOLINT
03106 template<> struct ConwayPolynomial<3, 4> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<2>, ZPZV<0>, ZPZV<0>, ZPZV<2>»; };  // NOLINT
03107 template<> struct ConwayPolynomial<3, 5> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<1>»; };  // NOLINT
03108 template<> struct ConwayPolynomial<3, 6> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<0>, ZPZV<1>, ZPZV<2>, ZPZV<2>»; };  // NOLINT
03109 template<> struct ConwayPolynomial<3, 7> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<0>, ZPZV<1>»; };  // NOLINT
03110 template<> struct ConwayPolynomial<3, 8> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<2>, ZPZV<2>»; };  // NOLINT
03111 template<> struct ConwayPolynomial<3, 9> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<2>, ZPZV<1>, ZPZV<1>»; };  // NOLINT
03112 template<> struct ConwayPolynomial<3, 10> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<2>, ZPZV<2>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<2>»; };  //
      NOLINT
03113 template<> struct ConwayPolynomial<3, 11> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<0>, ZPZV<1>»; };
      // NOLINT
03114 template<> struct ConwayPolynomial<3, 12> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<0>,
      ZPZV<2>»; };  // NOLINT
03115 template<> struct ConwayPolynomial<3, 13> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<2>, ZPZV<1>»; };  // NOLINT
03116 template<> struct ConwayPolynomial<3, 14> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<1>, ZPZV<1>, ZPZV<2>, ZPZV<1>, ZPZV<0>, ZPZV<2>,
      ZPZV<1>, ZPZV<0>, ZPZV<2>»; };  // NOLINT
03117 template<> struct ConwayPolynomial<3, 15> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<1>, ZPZV<1>»; };  // NOLINT
03118 template<> struct ConwayPolynomial<3, 16> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<2>, ZPZV<0>,
      ZPZV<2>, ZPZV<2>, ZPZV<2>, ZPZV<1>, ZPZV<2>»; };  // NOLINT
03119 template<> struct ConwayPolynomial<3, 17> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<1>»; };  // NOLINT
03120 template<> struct ConwayPolynomial<3, 18> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<0>,
      ZPZV<2>, ZPZV<1>, ZPZV<2>, ZPZV<0>, ZPZV<2>, ZPZV<0>, ZPZV<2>»; };  // NOLINT
03121 template<> struct ConwayPolynomial<3, 19> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<0>, ZPZV<1>»; };  // NOLINT
03122 template<> struct ConwayPolynomial<3, 20> { using ZPZ = aerobus::zpz<3>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<1>,
      ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<2>, ZPZV<2>, ZPZV<0>, ZPZV<1>, ZPZV<2>»; };  // NOLINT
03123 template<> struct ConwayPolynomial<5, 1> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<3>»; };  // NOLINT
03124 template<> struct ConwayPolynomial<5, 2> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<4>, ZPZV<2>»; };  // NOLINT
03125 template<> struct ConwayPolynomial<5, 3> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<3>, ZPZV<3>»; };  // NOLINT
03126 template<> struct ConwayPolynomial<5, 4> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<4>, ZPZV<4>, ZPZV<2>»; };  // NOLINT
03127 template<> struct ConwayPolynomial<5, 5> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<3>»; };  // NOLINT
03128 template<> struct ConwayPolynomial<5, 6> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<4>, ZPZV<1>, ZPZV<0>, ZPZV<2>»; };  // NOLINT
03129 template<> struct ConwayPolynomial<5, 7> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<3>»; };  // NOLINT
03130 template<> struct ConwayPolynomial<5, 8> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<4>, ZPZV<2>»; };  // NOLINT
03131 template<> struct ConwayPolynomial<5, 9> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<0>, ZPZV<1>, ZPZV<3>»; };  // NOLINT
03132 template<> struct ConwayPolynomial<5, 10> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<3>, ZPZV<2>, ZPZV<4>, ZPZV<1>, ZPZV<2>»; };  //
      NOLINT
03133 template<> struct ConwayPolynomial<5, 11> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<3>»; };
      // NOLINT
03134 template<> struct ConwayPolynomial<5, 12> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
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      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<4>, ZPZV<3>, ZPZV<2>,
      ZPZV<2»; };  // NOLINT
03135 template<> struct ConwayPolynomial<5, 13> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>,
      ZPZV<3>, ZPZV<3»; };  // NOLINT
03136 template<> struct ConwayPolynomial<5, 14> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<4>, ZPZV<2>, ZPZV<3>,
      ZPZV<0>, ZPZV<1>, ZPZV<2»; };  // NOLINT
03137 template<> struct ConwayPolynomial<5, 15> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<0>,
      ZPZV<3>, ZPZV<3>, ZPZV<4>, ZPZV<3»; };  // NOLINT
03138 template<> struct ConwayPolynomial<5, 16> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<4>, ZPZV<4>, ZPZV<4>,
      ZPZV<2>, ZPZV<4>, ZPZV<4>, ZPZV<1>, ZPZV<2»; };  // NOLINT
03139 template<> struct ConwayPolynomial<5, 17> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<2>, ZPZV<3»; };  // NOLINT
03140 template<> struct ConwayPolynomial<5, 18> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<1>, ZPZV<2>, ZPZV<0>,
      ZPZV<2>, ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<2>, ZPZV<0>, ZPZV<2»; };  // NOLINT
03141 template<> struct ConwayPolynomial<5, 19> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<3»; };  // NOLINT
03142 template<> struct ConwayPolynomial<5, 20> { using ZPZ = aerobus::zpz<5>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<0>, ZPZV<4>, ZPZV<3>,
      ZPZV<2>, ZPZV<0>, ZPZV<3>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<0>, ZPZV<1>, ZPZV<2»; };  // NOLINT
03143 template<> struct ConwayPolynomial<7, 1> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<4»; };  // NOLINT
03144 template<> struct ConwayPolynomial<7, 2> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<6>, ZPZV<3»; };  // NOLINT
03145 template<> struct ConwayPolynomial<7, 3> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<6>, ZPZV<0>, ZPZV<4»; };  // NOLINT
03146 template<> struct ConwayPolynomial<7, 4> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<5>, ZPZV<4>, ZPZV<3»; };  // NOLINT
03147 template<> struct ConwayPolynomial<7, 5> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<4»; };  // NOLINT
03148 template<> struct ConwayPolynomial<7, 6> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<5>, ZPZV<4>, ZPZV<6>, ZPZV<3»; };  // NOLINT
03149 template<> struct ConwayPolynomial<7, 7> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<4»; };  // NOLINT
03150 template<> struct ConwayPolynomial<7, 8> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<6>, ZPZV<2>, ZPZV<3»; };  // NOLINT
03151 template<> struct ConwayPolynomial<7, 9> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<4»; };  // NOLINT
03152 template<> struct ConwayPolynomial<7, 10> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<4>, ZPZV<1>, ZPZV<2>, ZPZV<3>, ZPZV<3»; };  //
      NOLINT
03153 template<> struct ConwayPolynomial<7, 11> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<4»; };
      // NOLINT
03154 template<> struct ConwayPolynomial<7, 12> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<5>, ZPZV<3>, ZPZV<2>, ZPZV<4>, ZPZV<0>, ZPZV<5>, ZPZV<0>,
      ZPZV<3»; };  // NOLINT
03155 template<> struct ConwayPolynomial<7, 13> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>,
      ZPZV<0>, ZPZV<4»; };  // NOLINT
03156 template<> struct ConwayPolynomial<7, 14> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<0>, ZPZV<6>, ZPZV<2>, ZPZV<0>,
      ZPZV<3>, ZPZV<6>, ZPZV<3»; };  // NOLINT
03157 template<> struct ConwayPolynomial<7, 15> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<6>, ZPZV<6>,
      ZPZV<4>, ZPZV<1>, ZPZV<2>, ZPZV<4»; };  // NOLINT
03158 template<> struct ConwayPolynomial<7, 16> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<5>, ZPZV<3>, ZPZV<4>,
      ZPZV<1>, ZPZV<6>, ZPZV<2>, ZPZV<4>, ZPZV<3»; };  // NOLINT
03159 template<> struct ConwayPolynomial<7, 17> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<4»; };  // NOLINT
03160 template<> struct ConwayPolynomial<7, 18> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<2>, ZPZV<6>, ZPZV<1>, ZPZV<6>, ZPZV<5>,
      ZPZV<1>, ZPZV<3>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<2>, ZPZV<3»; };  // NOLINT
03161 template<> struct ConwayPolynomial<7, 19> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<0>, ZPZV<4»; };  // NOLINT
03162 template<> struct ConwayPolynomial<7, 20> { using ZPZ = aerobus::zpz<7>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<6>, ZPZV<2>, ZPZV<5>,
      ZPZV<2>, ZPZV<3>, ZPZV<1>, ZPZV<3>, ZPZV<0>, ZPZV<3>, ZPZV<0>, ZPZV<1>, ZPZV<3»; };  // NOLINT
03163 template<> struct ConwayPolynomial<11, 1> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<9»; };  // NOLINT
03164 template<> struct ConwayPolynomial<11, 2> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<7>, ZPZV<2»; };  // NOLINT
03165 template<> struct ConwayPolynomial<11, 3> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<9»; };  // NOLINT
03166 template<> struct ConwayPolynomial<11, 4> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<8>, ZPZV<10>, ZPZV<2»; };  // NOLINT
03167 template<> struct ConwayPolynomial<11, 5> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<0>, ZPZV<9»; };  // NOLINT
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03168 template<> struct ConwayPolynomial<11, 6> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<3>, ZPZV<4>, ZPZV<6>, ZPZV<7>, ZPZV<2»; };  // NOLINT
03169 template<> struct ConwayPolynomial<11, 7> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<9»; };  // NOLINT
03170 template<> struct ConwayPolynomial<11, 8> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<7>, ZPZV<1>, ZPZV<7>, ZPZV<2»; };  // NOLINT
03171 template<> struct ConwayPolynomial<11, 9> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<8>, ZPZV<9»; };  // NOLINT
03172 template<> struct ConwayPolynomial<11, 10> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<8>, ZPZV<10>, ZPZV<6>, ZPZV<6>, ZPZV<2»; };  //
      NOLINT
03173 template<> struct ConwayPolynomial<11, 11> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<9»; };
      // NOLINT
03174 template<> struct ConwayPolynomial<11, 12> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<4>, ZPZV<2>, ZPZV<5>, ZPZV<5>, ZPZV<6>, ZPZV<5>,
      ZPZV<2»; };  // NOLINT
03175 template<> struct ConwayPolynomial<11, 13> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<7>, ZPZV<9»; };  // NOLINT
03176 template<> struct ConwayPolynomial<11, 14> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<9>, ZPZV<6>, ZPZV<4>, ZPZV<8>,
      ZPZV<6>, ZPZV<10>, ZPZV<2»; };  // NOLINT
03177 template<> struct ConwayPolynomial<11, 15> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<7>, ZPZV<0>,
      ZPZV<5>, ZPZV<0>, ZPZV<0>, ZPZV<9»; };  // NOLINT
03178 template<> struct ConwayPolynomial<11, 16> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<10>, ZPZV<1>, ZPZV<3>,
      ZPZV<5>, ZPZV<3>, ZPZV<10>, ZPZV<9>, ZPZV<2»; };  // NOLINT
03179 template<> struct ConwayPolynomial<11, 17> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<9»; };  // NOLINT
03180 template<> struct ConwayPolynomial<11, 18> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<8>, ZPZV<10>, ZPZV<8>, ZPZV<3>, ZPZV<9>,
      ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<9>, ZPZV<8>, ZPZV<2>, ZPZV<2»; };  // NOLINT
03181 template<> struct ConwayPolynomial<11, 19> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<2>, ZPZV<9»; };  // NOLINT
03182 template<> struct ConwayPolynomial<11, 20> { using ZPZ = aerobus::zpz<11>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<10>, ZPZV<9>, ZPZV<1>,
      ZPZV<5>, ZPZV<7>, ZPZV<2>, ZPZV<4>, ZPZV<5>, ZPZV<5>, ZPZV<6>, ZPZV<5>, ZPZV<2»; };  // NOLINT
03183 template<> struct ConwayPolynomial<13, 1> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<11»; };  // NOLINT
03184 template<> struct ConwayPolynomial<13, 2> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<12>, ZPZV<2»; };  // NOLINT
03185 template<> struct ConwayPolynomial<13, 3> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<11»; };  // NOLINT
03186 template<> struct ConwayPolynomial<13, 4> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<3>, ZPZV<12>, ZPZV<2»; };  // NOLINT
03187 template<> struct ConwayPolynomial<13, 5> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<11»; };  // NOLINT
03188 template<> struct ConwayPolynomial<13, 6> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<11>, ZPZV<11>, ZPZV<2»; };  // NOLINT
03189 template<> struct ConwayPolynomial<13, 7> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<11»; };  // NOLINT
03190 template<> struct ConwayPolynomial<13, 8> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<12>, ZPZV<2>, ZPZV<3>, ZPZV<2»; };  // NOLINT
03191 template<> struct ConwayPolynomial<13, 9> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<8>, ZPZV<12>, ZPZV<12>, ZPZV<11»; };  // NOLINT
03192 template<> struct ConwayPolynomial<13, 10> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<5>, ZPZV<8>, ZPZV<1>, ZPZV<1>, ZPZV<2»; };  //
      NOLINT
03193 template<> struct ConwayPolynomial<13, 11> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<11»; };
      // NOLINT
03194 template<> struct ConwayPolynomial<13, 12> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<5>, ZPZV<8>, ZPZV<11>, ZPZV<3>, ZPZV<1>, ZPZV<1>, ZPZV<4>,
      ZPZV<2»; };  // NOLINT
03195 template<> struct ConwayPolynomial<13, 13> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<12>, ZPZV<11»; };  // NOLINT
03196 template<> struct ConwayPolynomial<13, 14> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<0>, ZPZV<6>, ZPZV<11>, ZPZV<7>,
      ZPZV<10>, ZPZV<10>, ZPZV<2»; };  // NOLINT
03197 template<> struct ConwayPolynomial<13, 15> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<12>, ZPZV<2>, ZPZV<11>,
      ZPZV<10>, ZPZV<11>, ZPZV<8>, ZPZV<11»; };  // NOLINT
03198 template<> struct ConwayPolynomial<13, 16> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<12>, ZPZV<8>, ZPZV<2>,
      ZPZV<12>, ZPZV<9>, ZPZV<12>, ZPZV<6>, ZPZV<2»; };  // NOLINT
03199 template<> struct ConwayPolynomial<13, 17> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<6>, ZPZV<11»; };  // NOLINT
03200 template<> struct ConwayPolynomial<13, 18> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<4>, ZPZV<11>, ZPZV<11>, ZPZV<9>,
      ZPZV<5>, ZPZV<3>, ZPZV<5>, ZPZV<6>, ZPZV<0>, ZPZV<9>, ZPZV<2»; };  // NOLINT
03201 template<> struct ConwayPolynomial<13, 19> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
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      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<11»; };  // NOLINT
03202 template<> struct ConwayPolynomial<13, 20> { using ZPZ = aerobus::zpz<13>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<12>, ZPZV<9>, ZPZV<0>,
      ZPZV<7>, ZPZV<8>, ZPZV<7>, ZPZV<4>, ZPZV<0>, ZPZV<4>, ZPZV<8>, ZPZV<11>, ZPZV<2»; };  // NOLINT
03203 template<> struct ConwayPolynomial<17, 1> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<14»; };  // NOLINT
03204 template<> struct ConwayPolynomial<17, 2> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<16>, ZPZV<3»; };  // NOLINT
03205 template<> struct ConwayPolynomial<17, 3> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<14»; };  // NOLINT
03206 template<> struct ConwayPolynomial<17, 4> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<7>, ZPZV<10>, ZPZV<3»; };  // NOLINT
03207 template<> struct ConwayPolynomial<17, 5> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<14»; };  // NOLINT
03208 template<> struct ConwayPolynomial<17, 6> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<0>, ZPZV<10>, ZPZV<3>, ZPZV<3»; };  // NOLINT
03209 template<> struct ConwayPolynomial<17, 7> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<14»; };  // NOLINT
03210 template<> struct ConwayPolynomial<17, 8> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<12>, ZPZV<0>, ZPZV<6>, ZPZV<3»; };  // NOLINT
03211 template<> struct ConwayPolynomial<17, 9> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<8>, ZPZV<14»; };  // NOLINT
03212 template<> struct ConwayPolynomial<17, 10> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<6>, ZPZV<5>, ZPZV<9>, ZPZV<12>, ZPZV<3»; };  //
      NOLINT
03213 template<> struct ConwayPolynomial<17, 11> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<14»; };
      // NOLINT
03214 template<> struct ConwayPolynomial<17, 12> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<4>, ZPZV<14>, ZPZV<14>, ZPZV<13>, ZPZV<6>, ZPZV<14>, ZPZV<9>,
      ZPZV<3»; };  // NOLINT
03215 template<> struct ConwayPolynomial<17, 13> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<15>, ZPZV<14»; };  // NOLINT
03216 template<> struct ConwayPolynomial<17, 14> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<11>, ZPZV<1>, ZPZV<8>, ZPZV<16>, ZPZV<13>,
      ZPZV<9>, ZPZV<3>, ZPZV<3»; };  // NOLINT
03217 template<> struct ConwayPolynomial<17, 15> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<4>, ZPZV<16>,
      ZPZV<6>, ZPZV<14>, ZPZV<14>, ZPZV<14»; };  // NOLINT
03218 template<> struct ConwayPolynomial<17, 16> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<13>, ZPZV<5>, ZPZV<2>,
      ZPZV<12>, ZPZV<13>, ZPZV<12>, ZPZV<1>, ZPZV<3»; };  // NOLINT
03219 template<> struct ConwayPolynomial<17, 17> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<16>, ZPZV<14»; };  // NOLINT
03220 template<> struct ConwayPolynomial<17, 18> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<9>, ZPZV<16>, ZPZV<7>, ZPZV<1>,
      ZPZV<0>, ZPZV<9>, ZPZV<11>, ZPZV<13>, ZPZV<13>, ZPZV<9>, ZPZV<3»; };  // NOLINT
03221 template<> struct ConwayPolynomial<17, 19> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<14»; };  // NOLINT
03222 template<> struct ConwayPolynomial<17, 20> { using ZPZ = aerobus::zpz<17>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<5>, ZPZV<16>, ZPZV<14>,
      ZPZV<13>, ZPZV<3>, ZPZV<14>, ZPZV<9>, ZPZV<1>, ZPZV<13>, ZPZV<2>, ZPZV<5>, ZPZV<3»; };  // NOLINT
03223 template<> struct ConwayPolynomial<19, 1> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<17»; };  // NOLINT
03224 template<> struct ConwayPolynomial<19, 2> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<18>, ZPZV<2»; };  // NOLINT
03225 template<> struct ConwayPolynomial<19, 3> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<4>, ZPZV<17»; };  // NOLINT
03226 template<> struct ConwayPolynomial<19, 4> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<11>, ZPZV<2»; };  // NOLINT
03227 template<> struct ConwayPolynomial<19, 5> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<17»; };  // NOLINT
03228 template<> struct ConwayPolynomial<19, 6> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<17>, ZPZV<17>, ZPZV<6>, ZPZV<2»; };  // NOLINT
03229 template<> struct ConwayPolynomial<19, 7> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<17»; };  // NOLINT
03230 template<> struct ConwayPolynomial<19, 8> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<12>, ZPZV<10>, ZPZV<3>, ZPZV<2»; };  // NOLINT
03231 template<> struct ConwayPolynomial<19, 9> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<14>, ZPZV<16>, ZPZV<17»; };  // NOLINT
03232 template<> struct ConwayPolynomial<19, 10> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<18>, ZPZV<13>, ZPZV<17>, ZPZV<3>, ZPZV<4>, ZPZV<2»; };  //
      NOLINT
03233 template<> struct ConwayPolynomial<19, 11> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<17»; };
      // NOLINT
03234 template<> struct ConwayPolynomial<19, 12> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<2>, ZPZV<18>, ZPZV<2>, ZPZV<9>, ZPZV<16>, ZPZV<7>,
      ZPZV<2»; };  // NOLINT
03235 template<> struct ConwayPolynomial<19, 13> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<11>, ZPZV<17»; };  // NOLINT
03236 template<> struct ConwayPolynomial<19, 14> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
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      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<11>, ZPZV<11>, ZPZV<1>, ZPZV<5>,
      ZPZV<16>, ZPZV<7>, ZPZV<2»; };  // NOLINT
03237 template<> struct ConwayPolynomial<19, 15> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<10>, ZPZV<11>, ZPZV<13>,
      ZPZV<15>, ZPZV<14>, ZPZV<0>, ZPZV<17»; };  // NOLINT
03238 template<> struct ConwayPolynomial<19, 16> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<13>, ZPZV<0>,
      ZPZV<15>, ZPZV<9>, ZPZV<6>, ZPZV<14>, ZPZV<2»; };  // NOLINT
03239 template<> struct ConwayPolynomial<19, 17> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<17»; };  // NOLINT
03240 template<> struct ConwayPolynomial<19, 18> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<9>, ZPZV<7>, ZPZV<17>, ZPZV<5>,
      ZPZV<0>, ZPZV<16>, ZPZV<5>, ZPZV<7>, ZPZV<3>, ZPZV<14>, ZPZV<2»; };  // NOLINT
03241 template<> struct ConwayPolynomial<19, 19> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<18>, ZPZV<17»; };  // NOLINT
03242 template<> struct ConwayPolynomial<19, 20> { using ZPZ = aerobus::zpz<19>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<16>, ZPZV<13>, ZPZV<0>,
      ZPZV<4>, ZPZV<7>, ZPZV<8>, ZPZV<6>, ZPZV<0>, ZPZV<3>, ZPZV<6>, ZPZV<11>, ZPZV<2»; };  // NOLINT
03243 template<> struct ConwayPolynomial<23, 1> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<18»; };  // NOLINT
03244 template<> struct ConwayPolynomial<23, 2> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<21>, ZPZV<5»; };  // NOLINT
03245 template<> struct ConwayPolynomial<23, 3> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<18»; };  // NOLINT
03246 template<> struct ConwayPolynomial<23, 4> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<3>, ZPZV<19>, ZPZV<5»; };  // NOLINT
03247 template<> struct ConwayPolynomial<23, 5> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<18»; };  // NOLINT
03248 template<> struct ConwayPolynomial<23, 6> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<9>, ZPZV<9>, ZPZV<1>, ZPZV<5»; };  // NOLINT
03249 template<> struct ConwayPolynomial<23, 7> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<21>, ZPZV<18»; };  // NOLINT
03250 template<> struct ConwayPolynomial<23, 8> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<20>, ZPZV<5>, ZPZV<3>, ZPZV<5»; };  // NOLINT
03251 template<> struct ConwayPolynomial<23, 9> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<8>, ZPZV<9>, ZPZV<18»; };  // NOLINT
03252 template<> struct ConwayPolynomial<23, 10> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<17>, ZPZV<5>, ZPZV<15>, ZPZV<6>, ZPZV<1>, ZPZV<5»; };  //
      NOLINT
03253 template<> struct ConwayPolynomial<23, 11> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<22>, ZPZV<7>, ZPZV<18»;
      };  // NOLINT
03254 template<> struct ConwayPolynomial<23, 12> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<21>, ZPZV<21>, ZPZV<15>, ZPZV<14>, ZPZV<12>, ZPZV<18>,
      ZPZV<12>, ZPZV<5»; };  // NOLINT
03255 template<> struct ConwayPolynomial<23, 13> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<9>, ZPZV<18»; };  // NOLINT
03256 template<> struct ConwayPolynomial<23, 14> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<5>, ZPZV<16>, ZPZV<1>, ZPZV<18>, ZPZV<19>,
      ZPZV<1>, ZPZV<22>, ZPZV<5»; };  // NOLINT
03257 template<> struct ConwayPolynomial<23, 15> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<8>, ZPZV<15>,
      ZPZV<9>, ZPZV<7>, ZPZV<18>, ZPZV<18»; };  // NOLINT
03258 template<> struct ConwayPolynomial<23, 16> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<19>, ZPZV<16>,
      ZPZV<13>, ZPZV<1>, ZPZV<14>, ZPZV<17>, ZPZV<5»; };  // NOLINT
03259 template<> struct ConwayPolynomial<23, 17> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<20>, ZPZV<18»; };  // NOLINT
03260 template<> struct ConwayPolynomial<23, 18> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<18>, ZPZV<2>, ZPZV<1>, ZPZV<18>, ZPZV<3>,
      ZPZV<16>, ZPZV<21>, ZPZV<0>, ZPZV<11>, ZPZV<3>, ZPZV<19>, ZPZV<5»; };  // NOLINT
03261 template<> struct ConwayPolynomial<23, 19> { using ZPZ = aerobus::zpz<23>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<18»; };  // NOLINT
03262 template<> struct ConwayPolynomial<29, 1> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<27»; };  // NOLINT
03263 template<> struct ConwayPolynomial<29, 2> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<24>, ZPZV<2»; };  // NOLINT
03264 template<> struct ConwayPolynomial<29, 3> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<27»; };  // NOLINT
03265 template<> struct ConwayPolynomial<29, 4> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<15>, ZPZV<2»; };  // NOLINT
03266 template<> struct ConwayPolynomial<29, 5> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<27»; };  // NOLINT
03267 template<> struct ConwayPolynomial<29, 6> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<25>, ZPZV<17>, ZPZV<13>, ZPZV<2»; };  // NOLINT
03268 template<> struct ConwayPolynomial<29, 7> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<27»; };  // NOLINT
03269 template<> struct ConwayPolynomial<29, 8> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<24>, ZPZV<26>, ZPZV<23>, ZPZV<2»; };  // NOLINT
03270 template<> struct ConwayPolynomial<29, 9> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<22>, ZPZV<22>, ZPZV<27»; };  // NOLINT
03271 template<> struct ConwayPolynomial<29, 10> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
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      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<25>, ZPZV<8>, ZPZV<17>, ZPZV<2>, ZPZV<22>, ZPZV<2»; };  //
      NOLINT
03272 template<> struct ConwayPolynomial<29, 11> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<28>, ZPZV<8>, ZPZV<27»;
      };  // NOLINT
03273 template<> struct ConwayPolynomial<29, 12> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<19>, ZPZV<28>, ZPZV<9>, ZPZV<16>, ZPZV<25>, ZPZV<1>, ZPZV<1>,
      ZPZV<2»; };  // NOLINT
03274 template<> struct ConwayPolynomial<29, 13> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<7>, ZPZV<27»; };  // NOLINT
03275 template<> struct ConwayPolynomial<29, 14> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<3>, ZPZV<14>, ZPZV<10>, ZPZV<21>, ZPZV<18>,
      ZPZV<27>, ZPZV<5>, ZPZV<2»; };  // NOLINT
03276 template<> struct ConwayPolynomial<29, 15> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<14>, ZPZV<8>,
      ZPZV<1>, ZPZV<12>, ZPZV<26>, ZPZV<27»; };  // NOLINT
03277 template<> struct ConwayPolynomial<29, 16> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<27>, ZPZV<2>, ZPZV<18>,
      ZPZV<23>, ZPZV<1>, ZPZV<27>, ZPZV<10>, ZPZV<2»; };  // NOLINT
03278 template<> struct ConwayPolynomial<29, 17> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<27»; };  // NOLINT
03279 template<> struct ConwayPolynomial<29, 18> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<24>, ZPZV<1>, ZPZV<1>, ZPZV<6>, ZPZV<26>,
      ZPZV<2>, ZPZV<10>, ZPZV<8>, ZPZV<16>, ZPZV<19>, ZPZV<14>, ZPZV<2»; };  // NOLINT
03280 template<> struct ConwayPolynomial<29, 19> { using ZPZ = aerobus::zpz<29>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<27»; };  // NOLINT
03281 template<> struct ConwayPolynomial<31, 1> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<28»; };  // NOLINT
03282 template<> struct ConwayPolynomial<31, 2> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<29>, ZPZV<3»; };  // NOLINT
03283 template<> struct ConwayPolynomial<31, 3> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<28»; };  // NOLINT
03284 template<> struct ConwayPolynomial<31, 4> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<3>, ZPZV<16>, ZPZV<3»; };  // NOLINT
03285 template<> struct ConwayPolynomial<31, 5> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<28»; };  // NOLINT
03286 template<> struct ConwayPolynomial<31, 6> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<16>, ZPZV<8>, ZPZV<3»; };  // NOLINT
03287 template<> struct ConwayPolynomial<31, 7> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<28»; };  // NOLINT
03288 template<> struct ConwayPolynomial<31, 8> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<25>, ZPZV<12>, ZPZV<24>, ZPZV<3»; };  // NOLINT
03289 template<> struct ConwayPolynomial<31, 9> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<20>, ZPZV<29>, ZPZV<28»; };  // NOLINT
03290 template<> struct ConwayPolynomial<31, 10> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<30>, ZPZV<26>, ZPZV<13>, ZPZV<13>, ZPZV<13>, ZPZV<3»; };  //
      NOLINT
03291 template<> struct ConwayPolynomial<31, 11> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<20>, ZPZV<28»;
      };  // NOLINT
03292 template<> struct ConwayPolynomial<31, 12> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<14>, ZPZV<28>, ZPZV<2>, ZPZV<9>, ZPZV<25>, ZPZV<12>,
      ZPZV<3»; };  // NOLINT
03293 template<> struct ConwayPolynomial<31, 13> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<6>, ZPZV<28»; };  // NOLINT
03294 template<> struct ConwayPolynomial<31, 14> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<5>, ZPZV<1>, ZPZV<1>, ZPZV<18>,
      ZPZV<18>, ZPZV<6>, ZPZV<3»; };  // NOLINT
03295 template<> struct ConwayPolynomial<31, 15> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<30>, ZPZV<29>, ZPZV<12>,
      ZPZV<13>, ZPZV<23>, ZPZV<25>, ZPZV<28»; };  // NOLINT
03296 template<> struct ConwayPolynomial<31, 16> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<28>, ZPZV<24>, ZPZV<26>,
      ZPZV<28>, ZPZV<11>, ZPZV<19>, ZPZV<27>, ZPZV<3»; };  // NOLINT
03297 template<> struct ConwayPolynomial<31, 17> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<28»; };  // NOLINT
03298 template<> struct ConwayPolynomial<31, 18> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<27>, ZPZV<5>, ZPZV<24>, ZPZV<2>, ZPZV<7>,
      ZPZV<12>, ZPZV<11>, ZPZV<25>, ZPZV<25>, ZPZV<10>, ZPZV<6>, ZPZV<3»; };  // NOLINT
03299 template<> struct ConwayPolynomial<31, 19> { using ZPZ = aerobus::zpz<31>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<28»; };  // NOLINT
03300 template<> struct ConwayPolynomial<37, 1> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<35»; };  // NOLINT
03301 template<> struct ConwayPolynomial<37, 2> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<33>, ZPZV<2»; };  // NOLINT
03302 template<> struct ConwayPolynomial<37, 3> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<6>, ZPZV<35»; };  // NOLINT
03303 template<> struct ConwayPolynomial<37, 4> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<6>, ZPZV<24>, ZPZV<2»; };  // NOLINT
03304 template<> struct ConwayPolynomial<37, 5> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<35»; };  // NOLINT
```

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03305 template<> struct ConwayPolynomial<37, 6> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<35>, ZPZV<4>, ZPZV<30>, ZPZV<2>>; };  // NOLINT
03306 template<> struct ConwayPolynomial<37, 7> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<35>>; };  // NOLINT
03307 template<> struct ConwayPolynomial<37, 8> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<20>, ZPZV<27>, ZPZV<1>, ZPZV<2>>; };  // NOLINT
03308 template<> struct ConwayPolynomial<37, 9> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<20>, ZPZV<32>, ZPZV<35>>; };  // NOLINT
03309 template<> struct ConwayPolynomial<37, 10> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<29>, ZPZV<18>, ZPZV<11>, ZPZV<4>, ZPZV<2>>; };  //
      NOLINT
03310 template<> struct ConwayPolynomial<37, 11> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<35>>; };
      // NOLINT
03311 template<> struct ConwayPolynomial<37, 12> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<31>, ZPZV<10>, ZPZV<23>, ZPZV<23>, ZPZV<18>,
      ZPZV<33>, ZPZV<2>>; };  // NOLINT
03312 template<> struct ConwayPolynomial<37, 13> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<6>, ZPZV<35>>; };  // NOLINT
03313 template<> struct ConwayPolynomial<37, 14> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<35>, ZPZV<35>, ZPZV<1>, ZPZV<32>, ZPZV<16>,
      ZPZV<1>, ZPZV<9>, ZPZV<2>>; };  // NOLINT
03314 template<> struct ConwayPolynomial<37, 15> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<31>, ZPZV<28>, ZPZV<27>,
      ZPZV<13>, ZPZV<34>, ZPZV<33>, ZPZV<35>>; };  // NOLINT
03315 template<> struct ConwayPolynomial<37, 17> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<35>>; };  // NOLINT
03316 template<> struct ConwayPolynomial<37, 18> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<8>, ZPZV<19>, ZPZV<15>, ZPZV<1>, ZPZV<22>,
      ZPZV<20>, ZPZV<12>, ZPZV<32>, ZPZV<14>, ZPZV<27>, ZPZV<20>, ZPZV<2>>; };  // NOLINT
03317 template<> struct ConwayPolynomial<37, 19> { using ZPZ = aerobus::zpz<37>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<36>, ZPZV<23>, ZPZV<35>>; };  // NOLINT
03318 template<> struct ConwayPolynomial<41, 1> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<35>>; };  // NOLINT
03319 template<> struct ConwayPolynomial<41, 2> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<38>, ZPZV<6>>; };  // NOLINT
03320 template<> struct ConwayPolynomial<41, 3> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<35>>; };  // NOLINT
03321 template<> struct ConwayPolynomial<41, 4> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<23>, ZPZV<6>>; };  // NOLINT
03322 template<> struct ConwayPolynomial<41, 5> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<40>, ZPZV<14>, ZPZV<35>>; };  // NOLINT
03323 template<> struct ConwayPolynomial<41, 6> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<4>, ZPZV<33>, ZPZV<39>, ZPZV<6>, ZPZV<6>>; };  // NOLINT
03324 template<> struct ConwayPolynomial<41, 7> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<35>>; };  // NOLINT
03325 template<> struct ConwayPolynomial<41, 8> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<32>, ZPZV<20>, ZPZV<6>, ZPZV<6>>; };  // NOLINT
03326 template<> struct ConwayPolynomial<41, 9> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<31>, ZPZV<5>, ZPZV<35>>; };  // NOLINT
03327 template<> struct ConwayPolynomial<41, 10> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<31>, ZPZV<8>, ZPZV<20>, ZPZV<30>, ZPZV<6>>; };  //
      NOLINT
03328 template<> struct ConwayPolynomial<41, 11> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<20>, ZPZV<35>>;
      };  // NOLINT
03329 template<> struct ConwayPolynomial<41, 12> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<26>, ZPZV<13>, ZPZV<34>, ZPZV<24>, ZPZV<21>,
      ZPZV<27>, ZPZV<6>>; };  // NOLINT
03330 template<> struct ConwayPolynomial<41, 13> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<13>, ZPZV<35>>; };  // NOLINT
03331 template<> struct ConwayPolynomial<41, 14> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<15>, ZPZV<4>, ZPZV<27>, ZPZV<11>,
      ZPZV<39>, ZPZV<10>, ZPZV<6>>; };  // NOLINT
03332 template<> struct ConwayPolynomial<41, 15> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<29>, ZPZV<16>, ZPZV<2>,
      ZPZV<35>, ZPZV<10>, ZPZV<21>, ZPZV<35>>; };  // NOLINT
03333 template<> struct ConwayPolynomial<41, 17> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<35>>; };  // NOLINT
03334 template<> struct ConwayPolynomial<41, 18> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<7>, ZPZV<20>, ZPZV<23>, ZPZV<35>,
      ZPZV<38>, ZPZV<24>, ZPZV<12>, ZPZV<29>, ZPZV<10>, ZPZV<6>, ZPZV<6>>; };  // NOLINT
03335 template<> struct ConwayPolynomial<41, 19> { using ZPZ = aerobus::zpz<41>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<35>>; };  // NOLINT
03336 template<> struct ConwayPolynomial<43, 1> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<40>>; };  // NOLINT
03337 template<> struct ConwayPolynomial<43, 2> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<42>, ZPZV<3>>; };  // NOLINT
03338 template<> struct ConwayPolynomial<43, 3> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<40>>; };  // NOLINT
03339 template<> struct ConwayPolynomial<43, 4> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
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      ZPZV<0>, ZPZV<5>, ZPZV<42>, ZPZV<3»; };  // NOLINT
03340 template<> struct ConwayPolynomial<43, 5> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<40»; };  // NOLINT
03341 template<> struct ConwayPolynomial<43, 6> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<28>, ZPZV<21>, ZPZV<3»; };  // NOLINT
03342 template<> struct ConwayPolynomial<43, 7> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<42>, ZPZV<7>, ZPZV<40»; };  // NOLINT
03343 template<> struct ConwayPolynomial<43, 8> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<39>, ZPZV<20>, ZPZV<24>, ZPZV<3»; };  // NOLINT
03344 template<> struct ConwayPolynomial<43, 9> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<39>, ZPZV<1>, ZPZV<40»; };  // NOLINT
03345 template<> struct ConwayPolynomial<43, 10> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<26>, ZPZV<36>, ZPZV<5>, ZPZV<27>, ZPZV<24>, ZPZV<3»; };  //
      NOLINT
03346 template<> struct ConwayPolynomial<43, 11> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<40»; };
      // NOLINT
03347 template<> struct ConwayPolynomial<43, 12> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<34>, ZPZV<27>, ZPZV<16>, ZPZV<17>, ZPZV<6>, ZPZV<23>,
      ZPZV<38>, ZPZV<3»; };  // NOLINT
03348 template<> struct ConwayPolynomial<43, 13> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<4>, ZPZV<40»; };  // NOLINT
03349 template<> struct ConwayPolynomial<43, 14> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<38>, ZPZV<22>, ZPZV<24>, ZPZV<37>,
      ZPZV<18>, ZPZV<4>, ZPZV<19>, ZPZV<3»; };  // NOLINT
03350 template<> struct ConwayPolynomial<43, 15> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<37>, ZPZV<22>, ZPZV<42>,
      ZPZV<4>, ZPZV<15>, ZPZV<37>, ZPZV<40»; };  // NOLINT
03351 template<> struct ConwayPolynomial<43, 17> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<36>, ZPZV<40»; };  // NOLINT
03352 template<> struct ConwayPolynomial<43, 18> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<3>, ZPZV<28>, ZPZV<41>, ZPZV<24>, ZPZV<7>,
      ZPZV<24>, ZPZV<29>, ZPZV<16>, ZPZV<34>, ZPZV<37>, ZPZV<18>, ZPZV<3»; };  // NOLINT
03353 template<> struct ConwayPolynomial<43, 19> { using ZPZ = aerobus::zpz<43>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<30>, ZPZV<40»; };  // NOLINT
03354 template<> struct ConwayPolynomial<47, 1> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<42»; };  // NOLINT
03355 template<> struct ConwayPolynomial<47, 2> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<45>, ZPZV<5»; };  // NOLINT
03356 template<> struct ConwayPolynomial<47, 3> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<3>, ZPZV<42»; };  // NOLINT
03357 template<> struct ConwayPolynomial<47, 4> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<8>, ZPZV<40>, ZPZV<5»; };  // NOLINT
03358 template<> struct ConwayPolynomial<47, 5> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<42»; };  // NOLINT
03359 template<> struct ConwayPolynomial<47, 6> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<35>, ZPZV<9>, ZPZV<41>, ZPZV<5»; };  // NOLINT
03360 template<> struct ConwayPolynomial<47, 7> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<42»; };  // NOLINT
03361 template<> struct ConwayPolynomial<47, 8> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<29>, ZPZV<19>, ZPZV<3>, ZPZV<5»; };  // NOLINT
03362 template<> struct ConwayPolynomial<47, 9> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<19>, ZPZV<1>, ZPZV<42»; };  // NOLINT
03363 template<> struct ConwayPolynomial<47, 10> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<42>, ZPZV<14>, ZPZV<18>, ZPZV<45>, ZPZV<45>, ZPZV<5»; };  //
      NOLINT
03364 template<> struct ConwayPolynomial<47, 11> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<42»; };
      // NOLINT
03365 template<> struct ConwayPolynomial<47, 12> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<46>, ZPZV<40>, ZPZV<35>, ZPZV<12>, ZPZV<46>, ZPZV<14>,
      ZPZV<9>, ZPZV<5»; };  // NOLINT
03366 template<> struct ConwayPolynomial<47, 13> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<5>, ZPZV<42»; };  // NOLINT
03367 template<> struct ConwayPolynomial<47, 14> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<36>, ZPZV<20>, ZPZV<30>, ZPZV<17>,
      ZPZV<24>, ZPZV<9>, ZPZV<32>, ZPZV<5»; };  // NOLINT
03368 template<> struct ConwayPolynomial<47, 15> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<43>, ZPZV<31>, ZPZV<14>,
      ZPZV<42>, ZPZV<13>, ZPZV<17>, ZPZV<42»; };  // NOLINT
03369 template<> struct ConwayPolynomial<47, 17> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<16>, ZPZV<42»; };  // NOLINT
03370 template<> struct ConwayPolynomial<47, 18> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<41>, ZPZV<42>, ZPZV<26>, ZPZV<44>,
      ZPZV<24>, ZPZV<22>, ZPZV<11>, ZPZV<5>, ZPZV<45>, ZPZV<33>, ZPZV<5»; };  // NOLINT
03371 template<> struct ConwayPolynomial<47, 19> { using ZPZ = aerobus::zpz<47>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<35>, ZPZV<42»; };  // NOLINT
03372 template<> struct ConwayPolynomial<53, 1> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<51»; };  // NOLINT
03373 template<> struct ConwayPolynomial<53, 2> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<49>, ZPZV<2»; };  // NOLINT
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03374 template<> struct ConwayPolynomial<53, 3> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<3>, ZPZV<51>>; };  // NOLINT
03375 template<> struct ConwayPolynomial<53, 4> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<9>, ZPZV<38>, ZPZV<2>>; };  // NOLINT
03376 template<> struct ConwayPolynomial<53, 5> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<51>>; };  // NOLINT
03377 template<> struct ConwayPolynomial<53, 6> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<7>, ZPZV<4>, ZPZV<45>, ZPZV<2>>; };  // NOLINT
03378 template<> struct ConwayPolynomial<53, 7> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<51>>; };  // NOLINT
03379 template<> struct ConwayPolynomial<53, 8> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<29>, ZPZV<18>, ZPZV<1>, ZPZV<2>>; };  // NOLINT
03380 template<> struct ConwayPolynomial<53, 9> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<5>, ZPZV<51>>; };  // NOLINT
03381 template<> struct ConwayPolynomial<53, 10> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<27>, ZPZV<15>, ZPZV<29>, ZPZV<2>>; };  //
      NOLINT
03382 template<> struct ConwayPolynomial<53, 11> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<51>>
      };  // NOLINT
03383 template<> struct ConwayPolynomial<53, 12> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<34>, ZPZV<4>, ZPZV<13>, ZPZV<10>, ZPZV<42>, ZPZV<34>,
      ZPZV<41>, ZPZV<2>>; };  // NOLINT
03384 template<> struct ConwayPolynomial<53, 13> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<52>,
      ZPZV<28>, ZPZV<51>>; };  // NOLINT
03385 template<> struct ConwayPolynomial<53, 14> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<45>, ZPZV<23>, ZPZV<52>, ZPZV<0>, ZPZV<37>,
      ZPZV<12>, ZPZV<23>, ZPZV<2>>; };  // NOLINT
03386 template<> struct ConwayPolynomial<53, 15> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<22>, ZPZV<31>, ZPZV<15>,
      ZPZV<11>, ZPZV<20>, ZPZV<4>, ZPZV<51>>; };  // NOLINT
03387 template<> struct ConwayPolynomial<53, 17> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<51>>; };  // NOLINT
03388 template<> struct ConwayPolynomial<53, 18> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<52>, ZPZV<31>, ZPZV<51>, ZPZV<27>, ZPZV<0>,
      ZPZV<39>, ZPZV<44>, ZPZV<6>, ZPZV<8>, ZPZV<16>, ZPZV<11>, ZPZV<2>>; };  // NOLINT
03389 template<> struct ConwayPolynomial<53, 19> { using ZPZ = aerobus::zpz<53>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<51>>; };  // NOLINT
03390 template<> struct ConwayPolynomial<59, 1> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<57>>; };  // NOLINT
03391 template<> struct ConwayPolynomial<59, 2> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<58>, ZPZV<2>>; };  // NOLINT
03392 template<> struct ConwayPolynomial<59, 3> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<5>, ZPZV<57>>; };  // NOLINT
03393 template<> struct ConwayPolynomial<59, 4> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<40>, ZPZV<2>>; };  // NOLINT
03394 template<> struct ConwayPolynomial<59, 5> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<57>>; };  // NOLINT
03395 template<> struct ConwayPolynomial<59, 6> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<18>, ZPZV<38>, ZPZV<0>, ZPZV<2>>; };  // NOLINT
03396 template<> struct ConwayPolynomial<59, 7> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<57>>; };  // NOLINT
03397 template<> struct ConwayPolynomial<59, 8> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<16>, ZPZV<32>, ZPZV<2>, ZPZV<50>, ZPZV<2>>; };  // NOLINT
03398 template<> struct ConwayPolynomial<59, 9> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<32>, ZPZV<47>, ZPZV<57>>; };  // NOLINT
03399 template<> struct ConwayPolynomial<59, 10> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<28>, ZPZV<25>, ZPZV<4>, ZPZV<39>, ZPZV<15>, ZPZV<2>>; };  //
      NOLINT
03400 template<> struct ConwayPolynomial<59, 11> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<57>>; };
      // NOLINT
03401 template<> struct ConwayPolynomial<59, 12> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<39>, ZPZV<25>, ZPZV<51>, ZPZV<21>, ZPZV<38>, ZPZV<8>,
      ZPZV<1>, ZPZV<2>>; };  // NOLINT
03402 template<> struct ConwayPolynomial<59, 13> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<3>, ZPZV<57>>; };  // NOLINT
03403 template<> struct ConwayPolynomial<59, 14> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<33>, ZPZV<51>, ZPZV<11>, ZPZV<13>,
      ZPZV<25>, ZPZV<32>, ZPZV<26>, ZPZV<2>>; };  // NOLINT
03404 template<> struct ConwayPolynomial<59, 15> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<57>, ZPZV<24>, ZPZV<23>,
      ZPZV<13>, ZPZV<39>, ZPZV<58>, ZPZV<57>>; };  // NOLINT
03405 template<> struct ConwayPolynomial<59, 17> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<57>>; };  // NOLINT
03406 template<> struct ConwayPolynomial<59, 18> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<37>, ZPZV<38>, ZPZV<27>, ZPZV<11>,
      ZPZV<14>, ZPZV<7>, ZPZV<44>, ZPZV<16>, ZPZV<47>, ZPZV<34>, ZPZV<32>, ZPZV<2>>; };  // NOLINT
03407 template<> struct ConwayPolynomial<59, 19> { using ZPZ = aerobus::zpz<59>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<57>>; };  // NOLINT
03408 template<> struct ConwayPolynomial<61, 1> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
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      ZPZV<59»; };  // NOLINT
03409 template<> struct ConwayPolynomial<61, 2> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<60>, ZPZV<2»; };  // NOLINT
03410 template<> struct ConwayPolynomial<61, 3> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<7>, ZPZV<59»; };  // NOLINT
03411 template<> struct ConwayPolynomial<61, 4> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<3>, ZPZV<40>, ZPZV<2»; };  // NOLINT
03412 template<> struct ConwayPolynomial<61, 5> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<59»; };  // NOLINT
03413 template<> struct ConwayPolynomial<61, 6> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<49>, ZPZV<3>, ZPZV<29>, ZPZV<2»; };  // NOLINT
03414 template<> struct ConwayPolynomial<61, 7> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<59»; };  // NOLINT
03415 template<> struct ConwayPolynomial<61, 8> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<57>, ZPZV<1>, ZPZV<56>, ZPZV<2»; };  // NOLINT
03416 template<> struct ConwayPolynomial<61, 9> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<50>, ZPZV<18>, ZPZV<59»; };  // NOLINT
03417 template<> struct ConwayPolynomial<61, 10> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<28>, ZPZV<15>, ZPZV<44>, ZPZV<16>, ZPZV<6>, ZPZV<2»; };  //
      NOLINT
03418 template<> struct ConwayPolynomial<61, 11> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<18>, ZPZV<59»;
      };  // NOLINT
03419 template<> struct ConwayPolynomial<61, 12> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<42>, ZPZV<33>, ZPZV<8>, ZPZV<38>, ZPZV<14>, ZPZV<1>,
      ZPZV<15>, ZPZV<2»; };  // NOLINT
03420 template<> struct ConwayPolynomial<61, 13> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<3>, ZPZV<59»; };  // NOLINT
03421 template<> struct ConwayPolynomial<61, 14> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<48>, ZPZV<26>, ZPZV<11>, ZPZV<8>, ZPZV<30>,
      ZPZV<54>, ZPZV<48>, ZPZV<2»; };  // NOLINT
03422 template<> struct ConwayPolynomial<61, 15> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<39>, ZPZV<35>, ZPZV<44>,
      ZPZV<25>, ZPZV<23>, ZPZV<51>, ZPZV<59»; };  // NOLINT
03423 template<> struct ConwayPolynomial<61, 17> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<59»; };  // NOLINT
03424 template<> struct ConwayPolynomial<61, 18> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<35>, ZPZV<36>, ZPZV<13>, ZPZV<36>, ZPZV<4>,
      ZPZV<32>, ZPZV<57>, ZPZV<42>, ZPZV<25>, ZPZV<25>, ZPZV<52>, ZPZV<2»; };  // NOLINT
03425 template<> struct ConwayPolynomial<61, 19> { using ZPZ = aerobus::zpz<61>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<59»; };  // NOLINT
03426 template<> struct ConwayPolynomial<67, 1> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<65»; };  // NOLINT
03427 template<> struct ConwayPolynomial<67, 2> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<63>, ZPZV<2»; };  // NOLINT
03428 template<> struct ConwayPolynomial<67, 3> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<6>, ZPZV<65»; };  // NOLINT
03429 template<> struct ConwayPolynomial<67, 4> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<8>, ZPZV<54>, ZPZV<2»; };  // NOLINT
03430 template<> struct ConwayPolynomial<67, 5> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<65»; };  // NOLINT
03431 template<> struct ConwayPolynomial<67, 6> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<63>, ZPZV<49>, ZPZV<55>, ZPZV<2»; };  // NOLINT
03432 template<> struct ConwayPolynomial<67, 7> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<65»; };  // NOLINT
03433 template<> struct ConwayPolynomial<67, 8> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<46>, ZPZV<17>, ZPZV<64>, ZPZV<2»; };  // NOLINT
03434 template<> struct ConwayPolynomial<67, 9> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<25>, ZPZV<49>, ZPZV<55>, ZPZV<65»; };  // NOLINT
03435 template<> struct ConwayPolynomial<67, 10> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<21>, ZPZV<0>, ZPZV<16>, ZPZV<7>, ZPZV<23>, ZPZV<2»; };  //
      NOLINT
03436 template<> struct ConwayPolynomial<67, 11> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<66>, ZPZV<9>, ZPZV<65»;
      };  // NOLINT
03437 template<> struct ConwayPolynomial<67, 12> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<57>, ZPZV<27>, ZPZV<4>, ZPZV<55>, ZPZV<64>, ZPZV<21>,
      ZPZV<27>, ZPZV<2»; };  // NOLINT
03438 template<> struct ConwayPolynomial<67, 13> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<22>, ZPZV<65»; };  // NOLINT
03439 template<> struct ConwayPolynomial<67, 14> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<17>, ZPZV<22>, ZPZV<5>, ZPZV<56>, ZPZV<0>,
      ZPZV<1>, ZPZV<37>, ZPZV<2»; };  // NOLINT
03440 template<> struct ConwayPolynomial<67, 15> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<1>, ZPZV<52>, ZPZV<41>,
      ZPZV<20>, ZPZV<21>, ZPZV<46>, ZPZV<65»; };  // NOLINT
03441 template<> struct ConwayPolynomial<67, 17> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<65»; };  // NOLINT
03442 template<> struct ConwayPolynomial<67, 18> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<63>, ZPZV<52>, ZPZV<18>, ZPZV<33>,
      ZPZV<55>, ZPZV<28>, ZPZV<29>, ZPZV<51>, ZPZV<6>, ZPZV<59>, ZPZV<13>, ZPZV<2»; };  // NOLINT
03443 template<> struct ConwayPolynomial<67, 19> { using ZPZ = aerobus::zpz<67>; using type = POLYV<ZPZV<1>,
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      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<18>, ZPZV<65»; };  // NOLINT
03444 template<> struct ConwayPolynomial<71, 1> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<64»; };  // NOLINT
03445 template<> struct ConwayPolynomial<71, 2> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<69>, ZPZV<7»; };  // NOLINT
03446 template<> struct ConwayPolynomial<71, 3> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<4>, ZPZV<64»; };  // NOLINT
03447 template<> struct ConwayPolynomial<71, 4> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<4>, ZPZV<41>, ZPZV<7»; };  // NOLINT
03448 template<> struct ConwayPolynomial<71, 5> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<18>, ZPZV<64»; };  // NOLINT
03449 template<> struct ConwayPolynomial<71, 6> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<10>, ZPZV<13>, ZPZV<29>, ZPZV<7»; };  // NOLINT
03450 template<> struct ConwayPolynomial<71, 7> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<64»; };  // NOLINT
03451 template<> struct ConwayPolynomial<71, 8> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<53>, ZPZV<22>, ZPZV<19>, ZPZV<7»; };  // NOLINT
03452 template<> struct ConwayPolynomial<71, 9> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<43>, ZPZV<62>, ZPZV<64»; };  // NOLINT
03453 template<> struct ConwayPolynomial<71, 10> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<53>, ZPZV<17>, ZPZV<26>, ZPZV<1>, ZPZV<40>, ZPZV<7»; };  //
      NOLINT
03454 template<> struct ConwayPolynomial<71, 11> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<48>, ZPZV<64»;
      };  // NOLINT
03455 template<> struct ConwayPolynomial<71, 12> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<28>, ZPZV<29>, ZPZV<55>, ZPZV<21>, ZPZV<58>,
      ZPZV<23>, ZPZV<7»; };  // NOLINT
03456 template<> struct ConwayPolynomial<71, 13> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<27>, ZPZV<64»; };  // NOLINT
03457 template<> struct ConwayPolynomial<71, 15> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<28>, ZPZV<32>, ZPZV<18>,
      ZPZV<52>, ZPZV<67>, ZPZV<49>, ZPZV<64»; };  // NOLINT
03458 template<> struct ConwayPolynomial<71, 17> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<64»; };  // NOLINT
03459 template<> struct ConwayPolynomial<71, 19> { using ZPZ = aerobus::zpz<71>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<64»; };  // NOLINT
03460 template<> struct ConwayPolynomial<73, 1> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<68»; };  // NOLINT
03461 template<> struct ConwayPolynomial<73, 2> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<70>, ZPZV<5»; };  // NOLINT
03462 template<> struct ConwayPolynomial<73, 3> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<2>, ZPZV<68»; };  // NOLINT
03463 template<> struct ConwayPolynomial<73, 4> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<16>, ZPZV<56>, ZPZV<5»; };  // NOLINT
03464 template<> struct ConwayPolynomial<73, 5> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<68»; };  // NOLINT
03465 template<> struct ConwayPolynomial<73, 6> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<45>, ZPZV<23>, ZPZV<48>, ZPZV<5»; };  // NOLINT
03466 template<> struct ConwayPolynomial<73, 7> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<68»; };  // NOLINT
03467 template<> struct ConwayPolynomial<73, 8> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<53>, ZPZV<39>, ZPZV<18>, ZPZV<5»; };  // NOLINT
03468 template<> struct ConwayPolynomial<73, 9> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<72>, ZPZV<15>, ZPZV<68»; };  // NOLINT
03469 template<> struct ConwayPolynomial<73, 10> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<15>, ZPZV<23>, ZPZV<33>, ZPZV<32>, ZPZV<69>, ZPZV<5»; };  //
      NOLINT
03470 template<> struct ConwayPolynomial<73, 11> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<68»; };
      // NOLINT
03471 template<> struct ConwayPolynomial<73, 12> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<69>, ZPZV<52>, ZPZV<26>, ZPZV<20>, ZPZV<46>, ZPZV<29>,
      ZPZV<25>, ZPZV<5»; };  // NOLINT
03472 template<> struct ConwayPolynomial<73, 13> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<7>, ZPZV<68»; };  // NOLINT
03473 template<> struct ConwayPolynomial<73, 15> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<33>,
      ZPZV<57>, ZPZV<57>, ZPZV<62>, ZPZV<68»; };  // NOLINT
03474 template<> struct ConwayPolynomial<73, 17> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<68»; };  // NOLINT
03475 template<> struct ConwayPolynomial<73, 19> { using ZPZ = aerobus::zpz<73>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<25>, ZPZV<68»; };  // NOLINT
03476 template<> struct ConwayPolynomial<79, 1> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<76»; };  // NOLINT
03477 template<> struct ConwayPolynomial<79, 2> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<78>, ZPZV<3»; };  // NOLINT
03478 template<> struct ConwayPolynomial<79, 3> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<9>, ZPZV<76»; };  // NOLINT
03479 template<> struct ConwayPolynomial<79, 4> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
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      ZPZV<0>, ZPZV<2>, ZPZV<66>, ZPZV<3»; };  // NOLINT
03480 template<> struct ConwayPolynomial<79, 5> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<76»; };  // NOLINT
03481 template<> struct ConwayPolynomial<79, 6> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<28>, ZPZV<68>, ZPZV<3»; };  // NOLINT
03482 template<> struct ConwayPolynomial<79, 7> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<76»; };  // NOLINT
03483 template<> struct ConwayPolynomial<79, 8> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<60>, ZPZV<59>, ZPZV<48>, ZPZV<3»; };  // NOLINT
03484 template<> struct ConwayPolynomial<79, 9> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<57>, ZPZV<19>, ZPZV<76»; };  // NOLINT
03485 template<> struct ConwayPolynomial<79, 10> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<44>, ZPZV<51>, ZPZV<1>, ZPZV<30>, ZPZV<42>, ZPZV<3»; };  //
      NOLINT
03486 template<> struct ConwayPolynomial<79, 11> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<76»; };
      // NOLINT
03487 template<> struct ConwayPolynomial<79, 12> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<29>, ZPZV<45>, ZPZV<52>, ZPZV<7>, ZPZV<40>, ZPZV<59>,
      ZPZV<62>, ZPZV<3»; };  // NOLINT
03488 template<> struct ConwayPolynomial<79, 13> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<78>,
      ZPZV<4>, ZPZV<76»; };  // NOLINT
03489 template<> struct ConwayPolynomial<79, 17> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<25>, ZPZV<76»; };  // NOLINT
03490 template<> struct ConwayPolynomial<79, 19> { using ZPZ = aerobus::zpz<79>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<25>, ZPZV<76»; };  // NOLINT
03491 template<> struct ConwayPolynomial<83, 1> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<81»; };  // NOLINT
03492 template<> struct ConwayPolynomial<83, 2> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<82>, ZPZV<2»; };  // NOLINT
03493 template<> struct ConwayPolynomial<83, 3> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<3>, ZPZV<81»; };  // NOLINT
03494 template<> struct ConwayPolynomial<83, 4> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<4>, ZPZV<42>, ZPZV<2»; };  // NOLINT
03495 template<> struct ConwayPolynomial<83, 5> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<81»; };  // NOLINT
03496 template<> struct ConwayPolynomial<83, 6> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<76>, ZPZV<32>, ZPZV<17>, ZPZV<2»; };  // NOLINT
03497 template<> struct ConwayPolynomial<83, 7> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<81»; };  // NOLINT
03498 template<> struct ConwayPolynomial<83, 8> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<65>, ZPZV<23>, ZPZV<42>, ZPZV<2»; };  // NOLINT
03499 template<> struct ConwayPolynomial<83, 9> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<24>, ZPZV<18>, ZPZV<81»; };  // NOLINT
03500 template<> struct ConwayPolynomial<83, 10> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<0>, ZPZV<73>, ZPZV<0>, ZPZV<53>, ZPZV<2»; };  //
      NOLINT
03501 template<> struct ConwayPolynomial<83, 11> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<17>, ZPZV<81»;
      };  // NOLINT
03502 template<> struct ConwayPolynomial<83, 12> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<35>, ZPZV<12>, ZPZV<31>, ZPZV<19>, ZPZV<65>, ZPZV<55>,
      ZPZV<75>, ZPZV<2»; };  // NOLINT
03503 template<> struct ConwayPolynomial<83, 13> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<15>, ZPZV<81»; };  // NOLINT
03504 template<> struct ConwayPolynomial<83, 17> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<81»; };  // NOLINT
03505 template<> struct ConwayPolynomial<83, 19> { using ZPZ = aerobus::zpz<83>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<47>, ZPZV<81»; };  // NOLINT
03506 template<> struct ConwayPolynomial<89, 1> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<86»; };  // NOLINT
03507 template<> struct ConwayPolynomial<89, 2> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<82>, ZPZV<3»; };  // NOLINT
03508 template<> struct ConwayPolynomial<89, 3> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<3>, ZPZV<86»; };  // NOLINT
03509 template<> struct ConwayPolynomial<89, 4> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<4>, ZPZV<72>, ZPZV<3»; };  // NOLINT
03510 template<> struct ConwayPolynomial<89, 5> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<86»; };  // NOLINT
03511 template<> struct ConwayPolynomial<89, 6> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<1>, ZPZV<82>, ZPZV<80>, ZPZV<15>, ZPZV<3»; };  // NOLINT
03512 template<> struct ConwayPolynomial<89, 7> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<86»; };  // NOLINT
03513 template<> struct ConwayPolynomial<89, 8> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<65>, ZPZV<40>, ZPZV<79>, ZPZV<3»; };  // NOLINT
03514 template<> struct ConwayPolynomial<89, 9> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<12>, ZPZV<6>, ZPZV<86»; };  // NOLINT
03515 template<> struct ConwayPolynomial<89, 10> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<16>, ZPZV<33>, ZPZV<82>, ZPZV<52>, ZPZV<4>, ZPZV<3»; };  //
      NOLINT
03516 template<> struct ConwayPolynomial<89, 11> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
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      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<88>, ZPZV<26>, ZPZV<86»;
      };  // NOLINT
03517 template<> struct ConwayPolynomial<89, 12> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<85>, ZPZV<15>, ZPZV<44>, ZPZV<51>, ZPZV<8>, ZPZV<70>,
      ZPZV<52>, ZPZV<3»; };  // NOLINT
03518 template<> struct ConwayPolynomial<89, 13> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<17>, ZPZV<86»; };  // NOLINT
03519 template<> struct ConwayPolynomial<89, 17> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<20>, ZPZV<86»; };  // NOLINT
03520 template<> struct ConwayPolynomial<89, 19> { using ZPZ = aerobus::zpz<89>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<34>, ZPZV<86»; };  // NOLINT
03521 template<> struct ConwayPolynomial<97, 1> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<92»; };  // NOLINT
03522 template<> struct ConwayPolynomial<97, 2> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<96>, ZPZV<5»; };  // NOLINT
03523 template<> struct ConwayPolynomial<97, 3> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<9>, ZPZV<92»; };  // NOLINT
03524 template<> struct ConwayPolynomial<97, 4> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<6>, ZPZV<80>, ZPZV<5»; };  // NOLINT
03525 template<> struct ConwayPolynomial<97, 5> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<92»; };  // NOLINT
03526 template<> struct ConwayPolynomial<97, 6> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<92>, ZPZV<58>, ZPZV<88>, ZPZV<5»; };  // NOLINT
03527 template<> struct ConwayPolynomial<97, 7> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<92»; };  // NOLINT
03528 template<> struct ConwayPolynomial<97, 8> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<65>, ZPZV<1>, ZPZV<32>, ZPZV<5»; };  // NOLINT
03529 template<> struct ConwayPolynomial<97, 9> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<59>, ZPZV<7>, ZPZV<92»; };  // NOLINT
03530 template<> struct ConwayPolynomial<97, 10> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<22>, ZPZV<66>, ZPZV<34>, ZPZV<34>, ZPZV<20>, ZPZV<5»; };  //
      NOLINT
03531 template<> struct ConwayPolynomial<97, 11> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<92»; };
      // NOLINT
03532 template<> struct ConwayPolynomial<97, 12> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<30>, ZPZV<59>, ZPZV<81>, ZPZV<0>, ZPZV<86>, ZPZV<78>,
      ZPZV<94>, ZPZV<5»; };  // NOLINT
03533 template<> struct ConwayPolynomial<97, 13> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<3>, ZPZV<92»; };  // NOLINT
03534 template<> struct ConwayPolynomial<97, 17> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<92»; };  // NOLINT
03535 template<> struct ConwayPolynomial<97, 19> { using ZPZ = aerobus::zpz<97>; using type = POLYV<ZPZV<1>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<92»; };  // NOLINT
03536 template<> struct ConwayPolynomial<101, 1> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<99»; };  // NOLINT
03537 template<> struct ConwayPolynomial<101, 2> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<97>, ZPZV<2»; };  // NOLINT
03538 template<> struct ConwayPolynomial<101, 3> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<99»; };  // NOLINT
03539 template<> struct ConwayPolynomial<101, 4> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<78>, ZPZV<2»; };  // NOLINT
03540 template<> struct ConwayPolynomial<101, 5> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<99»; };  // NOLINT
03541 template<> struct ConwayPolynomial<101, 6> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<90>, ZPZV<20>, ZPZV<67>, ZPZV<2»; };  // NOLINT
03542 template<> struct ConwayPolynomial<101, 7> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<99»; };  // NOLINT
03543 template<> struct ConwayPolynomial<101, 8> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<76>, ZPZV<29>, ZPZV<24>, ZPZV<2»; };  //
      NOLINT
03544 template<> struct ConwayPolynomial<101, 9> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<64>, ZPZV<47>, ZPZV<99»; };
      // NOLINT
03545 template<> struct ConwayPolynomial<101, 10> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<67>, ZPZV<49>, ZPZV<100>, ZPZV<100>, ZPZV<52>,
      ZPZV<2»; };  // NOLINT
03546 template<> struct ConwayPolynomial<101, 11> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<31>, ZPZV<99»; };  // NOLINT
03547 template<> struct ConwayPolynomial<101, 12> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<79>, ZPZV<64>, ZPZV<39>, ZPZV<78>, ZPZV<48>,
      ZPZV<84>, ZPZV<21>, ZPZV<2»; };  // NOLINT
03548 template<> struct ConwayPolynomial<101, 13> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<99»; };  // NOLINT
03549 template<> struct ConwayPolynomial<101, 17> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<31>, ZPZV<99»; };  // NOLINT
03550 template<> struct ConwayPolynomial<101, 19> { using ZPZ = aerobus::zpz<101>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
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      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<24>, ZPZV<99»; };  //
      NOLINT
03551 template<> struct ConwayPolynomial<103, 1> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<98»; };  // NOLINT
03552 template<> struct ConwayPolynomial<103, 2> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<102>, ZPZV<5»; };  // NOLINT
03553 template<> struct ConwayPolynomial<103, 3> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<98»; };  // NOLINT
03554 template<> struct ConwayPolynomial<103, 4> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<88>, ZPZV<5»; };  // NOLINT
03555 template<> struct ConwayPolynomial<103, 5> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<98»; };  // NOLINT
03556 template<> struct ConwayPolynomial<103, 6> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<96>, ZPZV<9>, ZPZV<30>, ZPZV<5»; };  // NOLINT
03557 template<> struct ConwayPolynomial<103, 7> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<98»; };  // NOLINT
03558 template<> struct ConwayPolynomial<103, 8> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<70>, ZPZV<71>, ZPZV<49>, ZPZV<5»; };  //
      NOLINT
03559 template<> struct ConwayPolynomial<103, 9> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<97>, ZPZV<51>, ZPZV<98»; };
      // NOLINT
03560 template<> struct ConwayPolynomial<103, 10> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<101>, ZPZV<86>, ZPZV<101>, ZPZV<94>, ZPZV<11>,
      ZPZV<5»; };  // NOLINT
03561 template<> struct ConwayPolynomial<103, 11> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<5>, ZPZV<98»; };  // NOLINT
03562 template<> struct ConwayPolynomial<103, 12> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<74>, ZPZV<23>, ZPZV<94>, ZPZV<20>, ZPZV<81>,
      ZPZV<29>, ZPZV<88>, ZPZV<5»; };  // NOLINT
03563 template<> struct ConwayPolynomial<103, 13> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<98»; };  // NOLINT
03564 template<> struct ConwayPolynomial<103, 17> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<102>, ZPZV<8>, ZPZV<98»; };  // NOLINT
03565 template<> struct ConwayPolynomial<103, 19> { using ZPZ = aerobus::zpz<103>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<98»; };  //
      NOLINT
03566 template<> struct ConwayPolynomial<107, 1> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<105»; };  // NOLINT
03567 template<> struct ConwayPolynomial<107, 2> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<103>, ZPZV<2»; };  // NOLINT
03568 template<> struct ConwayPolynomial<107, 3> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<105»; };  // NOLINT
03569 template<> struct ConwayPolynomial<107, 4> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<13>, ZPZV<79>, ZPZV<2»; };  // NOLINT
03570 template<> struct ConwayPolynomial<107, 5> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<105»; };  // NOLINT
03571 template<> struct ConwayPolynomial<107, 6> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<52>, ZPZV<22>, ZPZV<79>, ZPZV<2»; };  // NOLINT
03572 template<> struct ConwayPolynomial<107, 7> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<16>, ZPZV<105»; };  // NOLINT
03573 template<> struct ConwayPolynomial<107, 8> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<105>, ZPZV<24>, ZPZV<95>, ZPZV<2»; };  //
      NOLINT
03574 template<> struct ConwayPolynomial<107, 9> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<3>, ZPZV<66>, ZPZV<105»; };
      // NOLINT
03575 template<> struct ConwayPolynomial<107, 10> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<94>, ZPZV<61>, ZPZV<83>, ZPZV<83>, ZPZV<95>,
      ZPZV<2»; };  // NOLINT
03576 template<> struct ConwayPolynomial<107, 11> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<8>, ZPZV<105»; };  // NOLINT
03577 template<> struct ConwayPolynomial<107, 12> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<37>, ZPZV<48>, ZPZV<6>, ZPZV<0>, ZPZV<61>,
      ZPZV<42>, ZPZV<57>, ZPZV<2»; };  // NOLINT
03578 template<> struct ConwayPolynomial<107, 13> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<105»; };  // NOLINT
03579 template<> struct ConwayPolynomial<107, 17> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<105»; };  // NOLINT
03580 template<> struct ConwayPolynomial<107, 19> { using ZPZ = aerobus::zpz<107>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<24>, ZPZV<105»; };  //
      NOLINT
03581 template<> struct ConwayPolynomial<109, 1> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<103»; };  // NOLINT
03582 template<> struct ConwayPolynomial<109, 2> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<108>, ZPZV<6»; };  // NOLINT
03583 template<> struct ConwayPolynomial<109, 3> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<103»; };  // NOLINT
03584 template<> struct ConwayPolynomial<109, 4> { using ZPZ = aerobus::zpz<109>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<11>, ZPZV<98>, ZPZV<6»; };  // NOLINT
03585 template<> struct ConwayPolynomial<109, 5> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<103»; };  // NOLINT
03586 template<> struct ConwayPolynomial<109, 6> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<107>, ZPZV<102>, ZPZV<66>, ZPZV<6»; };  // NOLINT
03587 template<> struct ConwayPolynomial<109, 7> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<103»; };  // NOLINT
03588 template<> struct ConwayPolynomial<109, 8> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<102>, ZPZV<34>, ZPZV<86>, ZPZV<6»; };  //
      NOLINT
03589 template<> struct ConwayPolynomial<109, 9> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<93>, ZPZV<87>, ZPZV<103»; };
      // NOLINT
03590 template<> struct ConwayPolynomial<109, 10> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<71>, ZPZV<55>, ZPZV<16>, ZPZV<75>, ZPZV<69>,
      ZPZV<6»; };  // NOLINT
03591 template<> struct ConwayPolynomial<109, 11> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<11>, ZPZV<103»; };  // NOLINT
03592 template<> struct ConwayPolynomial<109, 12> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<50>, ZPZV<53>, ZPZV<37>, ZPZV<8>, ZPZV<65>,
      ZPZV<103>, ZPZV<28>, ZPZV<6»; };  // NOLINT
03593 template<> struct ConwayPolynomial<109, 13> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<103»; };  // NOLINT
03594 template<> struct ConwayPolynomial<109, 17> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<103»; };  // NOLINT
03595 template<> struct ConwayPolynomial<109, 19> { using ZPZ = aerobus::zpz<109>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<103»; };  //
      NOLINT
03596 template<> struct ConwayPolynomial<113, 1> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<110»; };  // NOLINT
03597 template<> struct ConwayPolynomial<113, 2> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<101>, ZPZV<3»; };  // NOLINT
03598 template<> struct ConwayPolynomial<113, 3> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<110»; };  // NOLINT
03599 template<> struct ConwayPolynomial<113, 4> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<62>, ZPZV<3»; };  // NOLINT
03600 template<> struct ConwayPolynomial<113, 5> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<110»; };  // NOLINT
03601 template<> struct ConwayPolynomial<113, 6> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<59>, ZPZV<30>, ZPZV<71>, ZPZV<3»; };  // NOLINT
03602 template<> struct ConwayPolynomial<113, 7> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<110»; };  // NOLINT
03603 template<> struct ConwayPolynomial<113, 8> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<98>, ZPZV<38>, ZPZV<28>, ZPZV<3»; };  //
      NOLINT
03604 template<> struct ConwayPolynomial<113, 9> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<87>, ZPZV<71>, ZPZV<110»; };
      // NOLINT
03605 template<> struct ConwayPolynomial<113, 10> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<108>, ZPZV<57>, ZPZV<45>, ZPZV<83>, ZPZV<56>,
      ZPZV<3»; };  // NOLINT
03606 template<> struct ConwayPolynomial<113, 11> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<3>, ZPZV<110»; };  // NOLINT
03607 template<> struct ConwayPolynomial<113, 12> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<23>, ZPZV<62>, ZPZV<4>, ZPZV<98>, ZPZV<56>,
      ZPZV<10>, ZPZV<27>, ZPZV<3»; };  // NOLINT
03608 template<> struct ConwayPolynomial<113, 13> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<110»; };  // NOLINT
03609 template<> struct ConwayPolynomial<113, 17> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<110»; };  // NOLINT
03610 template<> struct ConwayPolynomial<113, 19> { using ZPZ = aerobus::zpz<113>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<22>, ZPZV<110»; };  //
      NOLINT
03611 template<> struct ConwayPolynomial<127, 1> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<124»; };  // NOLINT
03612 template<> struct ConwayPolynomial<127, 2> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<126>, ZPZV<3»; };  // NOLINT
03613 template<> struct ConwayPolynomial<127, 3> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<124»; };  // NOLINT
03614 template<> struct ConwayPolynomial<127, 4> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<97>, ZPZV<3»; };  // NOLINT
03615 template<> struct ConwayPolynomial<127, 5> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<124»; };  // NOLINT
03616 template<> struct ConwayPolynomial<127, 6> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<84>, ZPZV<115>, ZPZV<82>, ZPZV<3»; };  // NOLINT
03617 template<> struct ConwayPolynomial<127, 7> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<124»; };  // NOLINT
03618 template<> struct ConwayPolynomial<127, 8> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<104>, ZPZV<55>, ZPZV<8>, ZPZV<3»; };  //
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      NOLINT
03619 template<> struct ConwayPolynomial<127, 9> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<119>, ZPZV<126>, ZPZV<124>;
      };  // NOLINT
03620 template<> struct ConwayPolynomial<127, 10> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<107>, ZPZV<64>, ZPZV<95>, ZPZV<60>, ZPZV<4>,
      ZPZV<3>; };  // NOLINT
03621 template<> struct ConwayPolynomial<127, 11> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<11>, ZPZV<124>; };  // NOLINT
03622 template<> struct ConwayPolynomial<127, 12> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<119>, ZPZV<25>, ZPZV<33>, ZPZV<97>, ZPZV<15>,
      ZPZV<99>, ZPZV<8>, ZPZV<3>; };  // NOLINT
03623 template<> struct ConwayPolynomial<127, 13> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<124>; };  // NOLINT
03624 template<> struct ConwayPolynomial<127, 17> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<124>; };  // NOLINT
03625 template<> struct ConwayPolynomial<127, 19> { using ZPZ = aerobus::zpz<127>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<30>, ZPZV<124>; };  //
      NOLINT
03626 template<> struct ConwayPolynomial<131, 1> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<129>; };  // NOLINT
03627 template<> struct ConwayPolynomial<131, 2> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<127>, ZPZV<2>; };  // NOLINT
03628 template<> struct ConwayPolynomial<131, 3> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<129>; };  // NOLINT
03629 template<> struct ConwayPolynomial<131, 4> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<9>, ZPZV<109>, ZPZV<2>; };  // NOLINT
03630 template<> struct ConwayPolynomial<131, 5> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<129>; };  // NOLINT
03631 template<> struct ConwayPolynomial<131, 6> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<66>, ZPZV<4>, ZPZV<22>, ZPZV<2>; };  // NOLINT
03632 template<> struct ConwayPolynomial<131, 7> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<129>; };  // NOLINT
03633 template<> struct ConwayPolynomial<131, 8> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<72>, ZPZV<116>, ZPZV<104>, ZPZV<2>; };  //
      NOLINT
03634 template<> struct ConwayPolynomial<131, 9> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<6>, ZPZV<19>, ZPZV<129>; };
      // NOLINT
03635 template<> struct ConwayPolynomial<131, 10> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<124>, ZPZV<97>, ZPZV<9>, ZPZV<126>, ZPZV<44>,
      ZPZV<2>; };  // NOLINT
03636 template<> struct ConwayPolynomial<131, 11> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<6>, ZPZV<129>; };  // NOLINT
03637 template<> struct ConwayPolynomial<131, 12> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<50>, ZPZV<122>, ZPZV<40>, ZPZV<83>, ZPZV<125>,
      ZPZV<28>, ZPZV<103>, ZPZV<2>; };  // NOLINT
03638 template<> struct ConwayPolynomial<131, 13> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<129>; };  // NOLINT
03639 template<> struct ConwayPolynomial<131, 17> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<129>; };  // NOLINT
03640 template<> struct ConwayPolynomial<131, 19> { using ZPZ = aerobus::zpz<131>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<129>; };  //
      NOLINT
03641 template<> struct ConwayPolynomial<137, 1> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<134>; };  // NOLINT
03642 template<> struct ConwayPolynomial<137, 2> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<131>, ZPZV<3>; };  // NOLINT
03643 template<> struct ConwayPolynomial<137, 3> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<134>; };  // NOLINT
03644 template<> struct ConwayPolynomial<137, 4> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<95>, ZPZV<3>; };  // NOLINT
03645 template<> struct ConwayPolynomial<137, 5> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<134>; };  // NOLINT
03646 template<> struct ConwayPolynomial<137, 6> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<116>, ZPZV<102>, ZPZV<3>, ZPZV<3>; };  // NOLINT
03647 template<> struct ConwayPolynomial<137, 7> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<134>; };  // NOLINT
03648 template<> struct ConwayPolynomial<137, 8> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<105>, ZPZV<21>, ZPZV<34>, ZPZV<3>; };  //
      NOLINT
03649 template<> struct ConwayPolynomial<137, 9> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<80>, ZPZV<122>, ZPZV<134>;
      };  // NOLINT
03650 template<> struct ConwayPolynomial<137, 10> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<0>, ZPZV<20>, ZPZV<67>, ZPZV<93>, ZPZV<119>,
      ZPZV<3>; };  // NOLINT
03651 template<> struct ConwayPolynomial<137, 11> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
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      ZPZV<1>, ZPZV<134»; };  // NOLINT
03652 template<> struct ConwayPolynomial<137, 12> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<61>, ZPZV<40>, ZPZV<40>, ZPZV<12>, ZPZV<36>,
      ZPZV<135>, ZPZV<61>, ZPZV<3»; };  // NOLINT
03653 template<> struct ConwayPolynomial<137, 13> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<134»; };  // NOLINT
03654 template<> struct ConwayPolynomial<137, 17> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<136>, ZPZV<4>, ZPZV<134»; };  // NOLINT
03655 template<> struct ConwayPolynomial<137, 19> { using ZPZ = aerobus::zpz<137>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<18>, ZPZV<134»; };  //
      NOLINT
03656 template<> struct ConwayPolynomial<139, 1> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<137»; };  // NOLINT
03657 template<> struct ConwayPolynomial<139, 2> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<138>, ZPZV<2»; };  // NOLINT
03658 template<> struct ConwayPolynomial<139, 3> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<137»; };  // NOLINT
03659 template<> struct ConwayPolynomial<139, 4> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<96>, ZPZV<2»; };  // NOLINT
03660 template<> struct ConwayPolynomial<139, 5> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<137»; };  // NOLINT
03661 template<> struct ConwayPolynomial<139, 6> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<46>, ZPZV<10>, ZPZV<118>, ZPZV<2»; };  // NOLINT
03662 template<> struct ConwayPolynomial<139, 7> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<137»; };  // NOLINT
03663 template<> struct ConwayPolynomial<139, 8> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<103>, ZPZV<36>, ZPZV<21>, ZPZV<2»; };  //
      NOLINT
03664 template<> struct ConwayPolynomial<139, 9> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<70>, ZPZV<87>, ZPZV<137»; };
      // NOLINT
03665 template<> struct ConwayPolynomial<139, 10> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<110>, ZPZV<48>, ZPZV<130>, ZPZV<66>,
      ZPZV<106>, ZPZV<2»; };  // NOLINT
03666 template<> struct ConwayPolynomial<139, 11> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<7>, ZPZV<137»; };  // NOLINT
03667 template<> struct ConwayPolynomial<139, 12> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<120>, ZPZV<75>, ZPZV<41>, ZPZV<77>, ZPZV<106>,
      ZPZV<8>, ZPZV<10>, ZPZV<2»; };  // NOLINT
03668 template<> struct ConwayPolynomial<139, 13> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<22>, ZPZV<137»; };  // NOLINT
03669 template<> struct ConwayPolynomial<139, 17> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<137»; };  // NOLINT
03670 template<> struct ConwayPolynomial<139, 19> { using ZPZ = aerobus::zpz<139>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<23>, ZPZV<137»; };  //
      NOLINT
03671 template<> struct ConwayPolynomial<149, 1> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<147»; };  // NOLINT
03672 template<> struct ConwayPolynomial<149, 2> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<145>, ZPZV<2»; };  // NOLINT
03673 template<> struct ConwayPolynomial<149, 3> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<147»; };  // NOLINT
03674 template<> struct ConwayPolynomial<149, 4> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<107>, ZPZV<2»; };  // NOLINT
03675 template<> struct ConwayPolynomial<149, 5> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<147»; };  // NOLINT
03676 template<> struct ConwayPolynomial<149, 6> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<105>, ZPZV<33>, ZPZV<55>, ZPZV<2»; };  // NOLINT
03677 template<> struct ConwayPolynomial<149, 7> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<147»; };  // NOLINT
03678 template<> struct ConwayPolynomial<149, 8> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<140>, ZPZV<25>, ZPZV<123>, ZPZV<2»; };  //
      NOLINT
03679 template<> struct ConwayPolynomial<149, 9> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<146>, ZPZV<20>, ZPZV<147»;
      };  // NOLINT
03680 template<> struct ConwayPolynomial<149, 10> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<74>, ZPZV<42>, ZPZV<148>, ZPZV<143>, ZPZV<51>,
      ZPZV<2»; };  // NOLINT
03681 template<> struct ConwayPolynomial<149, 11> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<33>, ZPZV<147»; };  // NOLINT
03682 template<> struct ConwayPolynomial<149, 12> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<121>, ZPZV<91>, ZPZV<52>, ZPZV<9>,
      ZPZV<104>, ZPZV<110>, ZPZV<2»; };  // NOLINT
03683 template<> struct ConwayPolynomial<149, 13> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<147»; };  // NOLINT
03684 template<> struct ConwayPolynomial<149, 17> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
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      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<29>, ZPZV<147»; };  // NOLINT
03685 template<> struct ConwayPolynomial<149, 19> { using ZPZ = aerobus::zpz<149>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<147»; };  //
      NOLINT
03686 template<> struct ConwayPolynomial<151, 1> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<145»; };  // NOLINT
03687 template<> struct ConwayPolynomial<151, 2> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<149>, ZPZV<6»; };  // NOLINT
03688 template<> struct ConwayPolynomial<151, 3> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<145»; };  // NOLINT
03689 template<> struct ConwayPolynomial<151, 4> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<13>, ZPZV<89>, ZPZV<6»; };  // NOLINT
03690 template<> struct ConwayPolynomial<151, 5> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<145»; };  // NOLINT
03691 template<> struct ConwayPolynomial<151, 6> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<125>, ZPZV<18>, ZPZV<15>, ZPZV<6»; };  // NOLINT
03692 template<> struct ConwayPolynomial<151, 7> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<145»; };  // NOLINT
03693 template<> struct ConwayPolynomial<151, 8> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<140>, ZPZV<122>, ZPZV<43>, ZPZV<6»; };  //
      NOLINT
03694 template<> struct ConwayPolynomial<151, 9> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<126>, ZPZV<96>, ZPZV<145»;
      };  // NOLINT
03695 template<> struct ConwayPolynomial<151, 10> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<21>, ZPZV<104>, ZPZV<49>, ZPZV<20>, ZPZV<142>,
      ZPZV<6»; };  // NOLINT
03696 template<> struct ConwayPolynomial<151, 11> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<1>, ZPZV<145»; };  // NOLINT
03697 template<> struct ConwayPolynomial<151, 12> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<109>, ZPZV<121>, ZPZV<101>, ZPZV<6>, ZPZV<77>,
      ZPZV<107>, ZPZV<147>, ZPZV<6»; };  // NOLINT
03698 template<> struct ConwayPolynomial<151, 13> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<145»; };  // NOLINT
03699 template<> struct ConwayPolynomial<151, 17> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<24>, ZPZV<145»; };  // NOLINT
03700 template<> struct ConwayPolynomial<151, 19> { using ZPZ = aerobus::zpz<151>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<145»; };  //
      NOLINT
03701 template<> struct ConwayPolynomial<157, 1> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<152»; };  // NOLINT
03702 template<> struct ConwayPolynomial<157, 2> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<152>, ZPZV<5»; };  // NOLINT
03703 template<> struct ConwayPolynomial<157, 3> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<152»; };  // NOLINT
03704 template<> struct ConwayPolynomial<157, 4> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<11>, ZPZV<136>, ZPZV<5»; };  // NOLINT
03705 template<> struct ConwayPolynomial<157, 5> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<152»; };  // NOLINT
03706 template<> struct ConwayPolynomial<157, 6> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<130>, ZPZV<43>, ZPZV<144>, ZPZV<5»; };  // NOLINT
03707 template<> struct ConwayPolynomial<157, 7> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<152»; };  // NOLINT
03708 template<> struct ConwayPolynomial<157, 8> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<97>, ZPZV<40>, ZPZV<153>, ZPZV<5»; };  //
      NOLINT
03709 template<> struct ConwayPolynomial<157, 9> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<114>, ZPZV<52>, ZPZV<152»;
      };  // NOLINT
03710 template<> struct ConwayPolynomial<157, 10> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<61>, ZPZV<22>, ZPZV<124>, ZPZV<61>, ZPZV<93>,
      ZPZV<5»; };  // NOLINT
03711 template<> struct ConwayPolynomial<157, 11> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<29>, ZPZV<152»; };  // NOLINT
03712 template<> struct ConwayPolynomial<157, 12> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<77>, ZPZV<110>, ZPZV<72>, ZPZV<137>, ZPZV<43>,
      ZPZV<152>, ZPZV<57>, ZPZV<5»; };  // NOLINT
03713 template<> struct ConwayPolynomial<157, 13> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<156>, ZPZV<9>, ZPZV<152»; };  // NOLINT
03714 template<> struct ConwayPolynomial<157, 17> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<152»; };  // NOLINT
03715 template<> struct ConwayPolynomial<157, 19> { using ZPZ = aerobus::zpz<157>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<152»; };  //
      NOLINT
03716 template<> struct ConwayPolynomial<163, 1> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<161»; };  // NOLINT
03717 template<> struct ConwayPolynomial<163, 2> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<159>, ZPZV<2»; };  // NOLINT
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03718 template<> struct ConwayPolynomial<163, 3> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<161»; };  // NOLINT
03719 template<> struct ConwayPolynomial<163, 4> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<91>, ZPZV<2»; };  // NOLINT
03720 template<> struct ConwayPolynomial<163, 5> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<161»; };  // NOLINT
03721 template<> struct ConwayPolynomial<163, 6> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<83>, ZPZV<25>, ZPZV<156>, ZPZV<2»; };  // NOLINT
03722 template<> struct ConwayPolynomial<163, 7> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<161»; };  // NOLINT
03723 template<> struct ConwayPolynomial<163, 8> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<132>, ZPZV<83>, ZPZV<6>, ZPZV<2»; };  //
      NOLINT
03724 template<> struct ConwayPolynomial<163, 9> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<162>, ZPZV<127>, ZPZV<161»;
      };  // NOLINT
03725 template<> struct ConwayPolynomial<163, 10> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<111>, ZPZV<120>, ZPZV<125>, ZPZV<15>, ZPZV<0>,
      ZPZV<2»; };  // NOLINT
03726 template<> struct ConwayPolynomial<163, 11> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<11>, ZPZV<161»; };  // NOLINT
03727 template<> struct ConwayPolynomial<163, 12> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<39>, ZPZV<112>, ZPZV<31>, ZPZV<38>, ZPZV<103>,
      ZPZV<10>, ZPZV<69>, ZPZV<2»; };  // NOLINT
03728 template<> struct ConwayPolynomial<163, 13> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<24>, ZPZV<161»; };  // NOLINT
03729 template<> struct ConwayPolynomial<163, 17> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<71>, ZPZV<161»; };  // NOLINT
03730 template<> struct ConwayPolynomial<163, 19> { using ZPZ = aerobus::zpz<163>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<161»; };  //
      NOLINT
03731 template<> struct ConwayPolynomial<167, 1> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<162»; };  // NOLINT
03732 template<> struct ConwayPolynomial<167, 2> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<166>, ZPZV<5»; };  // NOLINT
03733 template<> struct ConwayPolynomial<167, 3> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<162»; };  // NOLINT
03734 template<> struct ConwayPolynomial<167, 4> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<120>, ZPZV<5»; };  // NOLINT
03735 template<> struct ConwayPolynomial<167, 5> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<162»; };  // NOLINT
03736 template<> struct ConwayPolynomial<167, 6> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<75>, ZPZV<38>, ZPZV<2>, ZPZV<5»; };  // NOLINT
03737 template<> struct ConwayPolynomial<167, 7> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<162»; };  // NOLINT
03738 template<> struct ConwayPolynomial<167, 8> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<149>, ZPZV<56>, ZPZV<113>, ZPZV<5»; };  //
      NOLINT
03739 template<> struct ConwayPolynomial<167, 9> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<165>, ZPZV<122>, ZPZV<162»;
      };  // NOLINT
03740 template<> struct ConwayPolynomial<167, 10> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<85>, ZPZV<68>, ZPZV<109>, ZPZV<143>,
      ZPZV<148>, ZPZV<5»; };  // NOLINT
03741 template<> struct ConwayPolynomial<167, 11> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<24>, ZPZV<162»; };  // NOLINT
03742 template<> struct ConwayPolynomial<167, 12> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<142>, ZPZV<10>, ZPZV<142>, ZPZV<131>,
      ZPZV<140>, ZPZV<41>, ZPZV<57>, ZPZV<5»; };  // NOLINT
03743 template<> struct ConwayPolynomial<167, 13> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<162»; };  // NOLINT
03744 template<> struct ConwayPolynomial<167, 17> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<32>, ZPZV<162»; };  // NOLINT
03745 template<> struct ConwayPolynomial<167, 19> { using ZPZ = aerobus::zpz<167>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<162»; };  //
      NOLINT
03746 template<> struct ConwayPolynomial<173, 1> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<171»; };  // NOLINT
03747 template<> struct ConwayPolynomial<173, 2> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<169>, ZPZV<2»; };  // NOLINT
03748 template<> struct ConwayPolynomial<173, 3> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<171»; };  // NOLINT
03749 template<> struct ConwayPolynomial<173, 4> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<102>, ZPZV<2»; };  // NOLINT
03750 template<> struct ConwayPolynomial<173, 5> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<171»; };  // NOLINT
03751 template<> struct ConwayPolynomial<173, 6> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<27>, ZPZV<134>, ZPZV<107>, ZPZV<2»; };  // NOLINT
03752 template<> struct ConwayPolynomial<173, 7> { using ZPZ = aerobus::zpz<173>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<171»; };  // NOLINT
03753 template<> struct ConwayPolynomial<173, 8> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<125>, ZPZV<158>, ZPZV<27>, ZPZV<2»; };  //
      NOLINT
03754 template<> struct ConwayPolynomial<173, 9> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<56>, ZPZV<104>, ZPZV<171»;
      };  // NOLINT
03755 template<> struct ConwayPolynomial<173, 10> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<156>, ZPZV<164>, ZPZV<48>, ZPZV<106>,
      ZPZV<58>, ZPZV<2»; };  // NOLINT
03756 template<> struct ConwayPolynomial<173, 11> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<12>, ZPZV<171»; };  // NOLINT
03757 template<> struct ConwayPolynomial<173, 12> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<29>, ZPZV<64>, ZPZV<46>, ZPZV<166>, ZPZV<0>,
      ZPZV<159>, ZPZV<22>, ZPZV<2»; };  // NOLINT
03758 template<> struct ConwayPolynomial<173, 13> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<171»; };  // NOLINT
03759 template<> struct ConwayPolynomial<173, 17> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<171»; };  // NOLINT
03760 template<> struct ConwayPolynomial<173, 19> { using ZPZ = aerobus::zpz<173>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<171»; };  //
      NOLINT
03761 template<> struct ConwayPolynomial<179, 1> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<177»; };  // NOLINT
03762 template<> struct ConwayPolynomial<179, 2> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<172>, ZPZV<2»; };  // NOLINT
03763 template<> struct ConwayPolynomial<179, 3> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<177»; };  // NOLINT
03764 template<> struct ConwayPolynomial<179, 4> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<109>, ZPZV<2»; };  // NOLINT
03765 template<> struct ConwayPolynomial<179, 5> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<177»; };  // NOLINT
03766 template<> struct ConwayPolynomial<179, 6> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<91>, ZPZV<55>, ZPZV<109>, ZPZV<2»; };  // NOLINT
03767 template<> struct ConwayPolynomial<179, 7> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<177»; };  // NOLINT
03768 template<> struct ConwayPolynomial<179, 8> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<163>, ZPZV<144>, ZPZV<73>, ZPZV<2»; };  //
      NOLINT
03769 template<> struct ConwayPolynomial<179, 9> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<40>, ZPZV<64>, ZPZV<177»; };
      // NOLINT
03770 template<> struct ConwayPolynomial<179, 10> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<115>, ZPZV<71>, ZPZV<150>, ZPZV<49>, ZPZV<87>,
      ZPZV<2»; };  // NOLINT
03771 template<> struct ConwayPolynomial<179, 11> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<28>, ZPZV<177»; };  // NOLINT
03772 template<> struct ConwayPolynomial<179, 12> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<103>, ZPZV<83>, ZPZV<43>, ZPZV<76>, ZPZV<8>,
      ZPZV<177>, ZPZV<1>, ZPZV<2»; };  // NOLINT
03773 template<> struct ConwayPolynomial<179, 13> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<18>, ZPZV<177»; };  // NOLINT
03774 template<> struct ConwayPolynomial<179, 17> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<177»; };  // NOLINT
03775 template<> struct ConwayPolynomial<179, 19> { using ZPZ = aerobus::zpz<179>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<177»; };  //
      NOLINT
03776 template<> struct ConwayPolynomial<181, 1> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<179»; };  // NOLINT
03777 template<> struct ConwayPolynomial<181, 2> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<177>, ZPZV<2»; };  // NOLINT
03778 template<> struct ConwayPolynomial<181, 3> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<179»; };  // NOLINT
03779 template<> struct ConwayPolynomial<181, 4> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<105>, ZPZV<2»; };  // NOLINT
03780 template<> struct ConwayPolynomial<181, 5> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<21>, ZPZV<179»; };  // NOLINT
03781 template<> struct ConwayPolynomial<181, 6> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<177>, ZPZV<163>, ZPZV<169>, ZPZV<2»; };  // NOLINT
03782 template<> struct ConwayPolynomial<181, 7> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<179»; };  // NOLINT
03783 template<> struct ConwayPolynomial<181, 8> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<108>, ZPZV<22>, ZPZV<149>, ZPZV<2»; };  //
      NOLINT
03784 template<> struct ConwayPolynomial<181, 9> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<107>, ZPZV<168>, ZPZV<179»;
      };  // NOLINT
03785 template<> struct ConwayPolynomial<181, 10> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<154>, ZPZV<104>, ZPZV<94>, ZPZV<57>, ZPZV<88>,
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      ZPZV<2»; };  // NOLINT
03786 template<> struct ConwayPolynomial<181, 11> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<24>, ZPZV<179»; };  // NOLINT
03787 template<> struct ConwayPolynomial<181, 12> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<171>, ZPZV<141>, ZPZV<45>, ZPZV<122>,
      ZPZV<175>, ZPZV<12>, ZPZV<10>, ZPZV<2»; };  // NOLINT
03788 template<> struct ConwayPolynomial<181, 13> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<179»; };  // NOLINT
03789 template<> struct ConwayPolynomial<181, 17> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<179»; };  // NOLINT
03790 template<> struct ConwayPolynomial<181, 19> { using ZPZ = aerobus::zpz<181>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<36>, ZPZV<179»; };  //
      NOLINT
03791 template<> struct ConwayPolynomial<191, 1> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<172»; };  // NOLINT
03792 template<> struct ConwayPolynomial<191, 2> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<190>, ZPZV<19»; };  // NOLINT
03793 template<> struct ConwayPolynomial<191, 3> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<172»; };  // NOLINT
03794 template<> struct ConwayPolynomial<191, 4> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<100>, ZPZV<19»; };  // NOLINT
03795 template<> struct ConwayPolynomial<191, 5> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<172»; };  // NOLINT
03796 template<> struct ConwayPolynomial<191, 6> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<110>, ZPZV<10>, ZPZV<10>, ZPZV<19»; };  // NOLINT
03797 template<> struct ConwayPolynomial<191, 7> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<172»; };  // NOLINT
03798 template<> struct ConwayPolynomial<191, 8> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<164>, ZPZV<139>, ZPZV<171>, ZPZV<19»; };  //
      NOLINT
03799 template<> struct ConwayPolynomial<191, 9> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<62>, ZPZV<124>, ZPZV<172»;
      };  // NOLINT
03800 template<> struct ConwayPolynomial<191, 10> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<113>, ZPZV<47>, ZPZV<173>, ZPZV<74>,
      ZPZV<156>, ZPZV<19»; };  // NOLINT
03801 template<> struct ConwayPolynomial<191, 11> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<6>, ZPZV<172»; };  // NOLINT
03802 template<> struct ConwayPolynomial<191, 12> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<79>, ZPZV<168>, ZPZV<25>, ZPZV<49>, ZPZV<90>,
      ZPZV<7>, ZPZV<151>, ZPZV<19»; };  // NOLINT
03803 template<> struct ConwayPolynomial<191, 13> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<172»; };  // NOLINT
03804 template<> struct ConwayPolynomial<191, 17> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<172»; };  // NOLINT
03805 template<> struct ConwayPolynomial<191, 19> { using ZPZ = aerobus::zpz<191>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<190>, ZPZV<2>, ZPZV<172»; };  //
      NOLINT
03806 template<> struct ConwayPolynomial<193, 1> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<188»; };  // NOLINT
03807 template<> struct ConwayPolynomial<193, 2> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<192>, ZPZV<5»; };  // NOLINT
03808 template<> struct ConwayPolynomial<193, 3> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<188»; };  // NOLINT
03809 template<> struct ConwayPolynomial<193, 4> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<148>, ZPZV<5»; };  // NOLINT
03810 template<> struct ConwayPolynomial<193, 5> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<188»; };  // NOLINT
03811 template<> struct ConwayPolynomial<193, 6> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<149>, ZPZV<8>, ZPZV<172>, ZPZV<5»; };  // NOLINT
03812 template<> struct ConwayPolynomial<193, 7> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<188»; };  // NOLINT
03813 template<> struct ConwayPolynomial<193, 8> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<145>, ZPZV<34>, ZPZV<154>, ZPZV<5»; };  //
      NOLINT
03814 template<> struct ConwayPolynomial<193, 9> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<168>, ZPZV<27>, ZPZV<188»;
      };  // NOLINT
03815 template<> struct ConwayPolynomial<193, 10> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<20>, ZPZV<51>, ZPZV<77>, ZPZV<0>, ZPZV<89>,
      ZPZV<5»; };  // NOLINT
03816 template<> struct ConwayPolynomial<193, 11> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<1>, ZPZV<188»; };  // NOLINT
03817 template<> struct ConwayPolynomial<193, 12> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<155>, ZPZV<52>, ZPZV<135>, ZPZV<152>,
      ZPZV<90>, ZPZV<46>, ZPZV<28>, ZPZV<5»; };  // NOLINT
03818 template<> struct ConwayPolynomial<193, 13> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
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      ZPZV<0>, ZPZV<0>, ZPZV<39>, ZPZV<188»; };  // NOLINT
03819 template<> struct ConwayPolynomial<193, 17> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<188»; };  // NOLINT
03820 template<> struct ConwayPolynomial<193, 19> { using ZPZ = aerobus::zpz<193>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<188»; };  //
      NOLINT
03821 template<> struct ConwayPolynomial<197, 1> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<195»; };  // NOLINT
03822 template<> struct ConwayPolynomial<197, 2> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<192>, ZPZV<2»; };  // NOLINT
03823 template<> struct ConwayPolynomial<197, 3> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<195»; };  // NOLINT
03824 template<> struct ConwayPolynomial<197, 4> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<16>, ZPZV<124>, ZPZV<2»; };  // NOLINT
03825 template<> struct ConwayPolynomial<197, 5> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<195»; };  // NOLINT
03826 template<> struct ConwayPolynomial<197, 6> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<124>, ZPZV<79>, ZPZV<173>, ZPZV<2»; };  // NOLINT
03827 template<> struct ConwayPolynomial<197, 7> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<195»; };  // NOLINT
03828 template<> struct ConwayPolynomial<197, 8> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<176>, ZPZV<96>, ZPZV<29>, ZPZV<2»; };  //
      NOLINT
03829 template<> struct ConwayPolynomial<197, 9> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<127>, ZPZV<8>, ZPZV<195»;
      };  // NOLINT
03830 template<> struct ConwayPolynomial<197, 10> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<121>, ZPZV<137>, ZPZV<8>, ZPZV<73>, ZPZV<42>,
      ZPZV<2»; };  // NOLINT
03831 template<> struct ConwayPolynomial<197, 11> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<14>, ZPZV<195»; };  // NOLINT
03832 template<> struct ConwayPolynomial<197, 12> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<168>, ZPZV<15>, ZPZV<130>, ZPZV<141>, ZPZV<9>,
      ZPZV<90>, ZPZV<163>, ZPZV<2»; };  // NOLINT
03833 template<> struct ConwayPolynomial<197, 13> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<39>, ZPZV<195»; };  // NOLINT
03834 template<> struct ConwayPolynomial<197, 17> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<35>, ZPZV<195»; };  // NOLINT
03835 template<> struct ConwayPolynomial<197, 19> { using ZPZ = aerobus::zpz<197>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<195»; };  //
      NOLINT
03836 template<> struct ConwayPolynomial<199, 1> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<196»; };  // NOLINT
03837 template<> struct ConwayPolynomial<199, 2> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<193>, ZPZV<3»; };  // NOLINT
03838 template<> struct ConwayPolynomial<199, 3> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<196»; };  // NOLINT
03839 template<> struct ConwayPolynomial<199, 4> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<162>, ZPZV<3»; };  // NOLINT
03840 template<> struct ConwayPolynomial<199, 5> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<196»; };  // NOLINT
03841 template<> struct ConwayPolynomial<199, 6> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<90>, ZPZV<58>, ZPZV<79>, ZPZV<3»; };  // NOLINT
03842 template<> struct ConwayPolynomial<199, 7> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<196»; };  // NOLINT
03843 template<> struct ConwayPolynomial<199, 8> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<160>, ZPZV<23>, ZPZV<159>, ZPZV<3»; };  //
      NOLINT
03844 template<> struct ConwayPolynomial<199, 9> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<177>, ZPZV<141>, ZPZV<196»;
      };  // NOLINT
03845 template<> struct ConwayPolynomial<199, 10> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<171>, ZPZV<158>, ZPZV<31>, ZPZV<54>, ZPZV<9>,
      ZPZV<3»; };  // NOLINT
03846 template<> struct ConwayPolynomial<199, 11> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<1>, ZPZV<196»; };  // NOLINT
03847 template<> struct ConwayPolynomial<199, 12> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<33>, ZPZV<192>, ZPZV<197>, ZPZV<138>,
      ZPZV<69>, ZPZV<57>, ZPZV<151>, ZPZV<3»; };  // NOLINT
03848 template<> struct ConwayPolynomial<199, 13> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<196»; };  // NOLINT
03849 template<> struct ConwayPolynomial<199, 17> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<196»; };  // NOLINT
03850 template<> struct ConwayPolynomial<199, 19> { using ZPZ = aerobus::zpz<199>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<196»; };  //
      NOLINT
03851 template<> struct ConwayPolynomial<211, 1> { using ZPZ = aerobus::zpz<211>; using type =
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      POLYV<ZPZV<1>, ZPZV<209»; };  // NOLINT
03852 template<> struct ConwayPolynomial<211, 2> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<207>, ZPZV<2»; };  // NOLINT
03853 template<> struct ConwayPolynomial<211, 3> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<209»; };  // NOLINT
03854 template<> struct ConwayPolynomial<211, 4> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<161>, ZPZV<2»; };  // NOLINT
03855 template<> struct ConwayPolynomial<211, 5> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<209»; };  // NOLINT
03856 template<> struct ConwayPolynomial<211, 6> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<81>, ZPZV<194>, ZPZV<133>, ZPZV<2»; };  // NOLINT
03857 template<> struct ConwayPolynomial<211, 7> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<209»; };  // NOLINT
03858 template<> struct ConwayPolynomial<211, 8> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<200>, ZPZV<87>, ZPZV<29>, ZPZV<2»; };  //
      NOLINT
03859 template<> struct ConwayPolynomial<211, 9> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<139>, ZPZV<26>, ZPZV<209»;
      };  // NOLINT
03860 template<> struct ConwayPolynomial<211, 10> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<30>, ZPZV<61>, ZPZV<148>, ZPZV<87>, ZPZV<125>,
      ZPZV<2»; };  // NOLINT
03861 template<> struct ConwayPolynomial<211, 11> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<7>, ZPZV<209»; };  // NOLINT
03862 template<> struct ConwayPolynomial<211, 12> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<50>, ZPZV<145>, ZPZV<126>, ZPZV<184>,
      ZPZV<84>, ZPZV<27>, ZPZV<2»; };  // NOLINT
03863 template<> struct ConwayPolynomial<211, 13> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<209»; };  // NOLINT
03864 template<> struct ConwayPolynomial<211, 17> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<209»; };  // NOLINT
03865 template<> struct ConwayPolynomial<211, 19> { using ZPZ = aerobus::zpz<211>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<17>, ZPZV<209»; };  //
      NOLINT
03866 template<> struct ConwayPolynomial<223, 1> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<220»; };  // NOLINT
03867 template<> struct ConwayPolynomial<223, 2> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<221>, ZPZV<3»; };  // NOLINT
03868 template<> struct ConwayPolynomial<223, 3> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<220»; };  // NOLINT
03869 template<> struct ConwayPolynomial<223, 4> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<163>, ZPZV<3»; };  // NOLINT
03870 template<> struct ConwayPolynomial<223, 5> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<220»; };  // NOLINT
03871 template<> struct ConwayPolynomial<223, 6> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<68>, ZPZV<24>, ZPZV<196>, ZPZV<3»; };  // NOLINT
03872 template<> struct ConwayPolynomial<223, 7> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<220»; };  // NOLINT
03873 template<> struct ConwayPolynomial<223, 8> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<139>, ZPZV<98>, ZPZV<138>, ZPZV<3»; };  //
      NOLINT
03874 template<> struct ConwayPolynomial<223, 9> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<164>, ZPZV<64>, ZPZV<220»;
      };  // NOLINT
03875 template<> struct ConwayPolynomial<223, 10> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<118>, ZPZV<177>, ZPZV<87>, ZPZV<99>, ZPZV<62>,
      ZPZV<3»; };  // NOLINT
03876 template<> struct ConwayPolynomial<223, 11> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<8>, ZPZV<220»; };  // NOLINT
03877 template<> struct ConwayPolynomial<223, 12> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<64>, ZPZV<94>, ZPZV<11>, ZPZV<105>, ZPZV<64>,
      ZPZV<151>, ZPZV<213>, ZPZV<3»; };  // NOLINT
03878 template<> struct ConwayPolynomial<223, 13> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<23>, ZPZV<220»; };  // NOLINT
03879 template<> struct ConwayPolynomial<223, 17> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<220»; };  // NOLINT
03880 template<> struct ConwayPolynomial<223, 19> { using ZPZ = aerobus::zpz<223>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<220»; };  //
      NOLINT
03881 template<> struct ConwayPolynomial<227, 1> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<225»; };  // NOLINT
03882 template<> struct ConwayPolynomial<227, 2> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<220>, ZPZV<2»; };  // NOLINT
03883 template<> struct ConwayPolynomial<227, 3> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<225»; };  // NOLINT
03884 template<> struct ConwayPolynomial<227, 4> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<143>, ZPZV<2»; };  // NOLINT
03885 template<> struct ConwayPolynomial<227, 5> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<225»; };  // NOLINT
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03886 template<> struct ConwayPolynomial<227, 6> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<174>, ZPZV<24>, ZPZV<135>, ZPZV<2>>; };  // NOLINT
03887 template<> struct ConwayPolynomial<227, 7> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<18>, ZPZV<225>>; };  // NOLINT
03888 template<> struct ConwayPolynomial<227, 8> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<151>, ZPZV<176>, ZPZV<106>, ZPZV<2>>; };  //
      NOLINT
03889 template<> struct ConwayPolynomial<227, 9> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<24>, ZPZV<183>, ZPZV<225>>;
      };  // NOLINT
03890 template<> struct ConwayPolynomial<227, 10> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<22>, ZPZV<199>, ZPZV<12>, ZPZV<93>, ZPZV<77>,
      ZPZV<2>>; };  // NOLINT
03891 template<> struct ConwayPolynomial<227, 11> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<2>, ZPZV<225>>; };  // NOLINT
03892 template<> struct ConwayPolynomial<227, 12> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<123>, ZPZV<99>, ZPZV<160>, ZPZV<96>,
      ZPZV<127>, ZPZV<142>, ZPZV<94>, ZPZV<2>>; };  // NOLINT
03893 template<> struct ConwayPolynomial<227, 13> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<225>>; };  // NOLINT
03894 template<> struct ConwayPolynomial<227, 17> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<225>>; };  // NOLINT
03895 template<> struct ConwayPolynomial<227, 19> { using ZPZ = aerobus::zpz<227>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<34>, ZPZV<225>>; };  //
      NOLINT
03896 template<> struct ConwayPolynomial<229, 1> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<223>>; };  // NOLINT
03897 template<> struct ConwayPolynomial<229, 2> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<228>, ZPZV<6>>; };  // NOLINT
03898 template<> struct ConwayPolynomial<229, 3> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<223>>; };  // NOLINT
03899 template<> struct ConwayPolynomial<229, 4> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<162>, ZPZV<6>>; };  // NOLINT
03900 template<> struct ConwayPolynomial<229, 5> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<223>>; };  // NOLINT
03901 template<> struct ConwayPolynomial<229, 6> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<24>, ZPZV<160>, ZPZV<186>, ZPZV<6>>; };  // NOLINT
03902 template<> struct ConwayPolynomial<229, 7> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<223>>; };  // NOLINT
03903 template<> struct ConwayPolynomial<229, 8> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<193>, ZPZV<62>, ZPZV<205>, ZPZV<6>>; };  //
      NOLINT
03904 template<> struct ConwayPolynomial<229, 9> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<117>, ZPZV<50>, ZPZV<223>>;
      };  // NOLINT
03905 template<> struct ConwayPolynomial<229, 10> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<185>, ZPZV<135>, ZPZV<158>, ZPZV<167>,
      ZPZV<98>, ZPZV<6>>; };  // NOLINT
03906 template<> struct ConwayPolynomial<229, 11> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<2>, ZPZV<223>>; };  // NOLINT
03907 template<> struct ConwayPolynomial<229, 12> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<131>, ZPZV<140>, ZPZV<25>, ZPZV<6>, ZPZV<172>,
      ZPZV<9>, ZPZV<145>, ZPZV<6>>; };  // NOLINT
03908 template<> struct ConwayPolynomial<229, 13> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<47>, ZPZV<223>>; };  // NOLINT
03909 template<> struct ConwayPolynomial<229, 17> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<223>>; };  // NOLINT
03910 template<> struct ConwayPolynomial<229, 19> { using ZPZ = aerobus::zpz<229>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<228>, ZPZV<15>, ZPZV<223>>; };  //
      NOLINT
03911 template<> struct ConwayPolynomial<233, 1> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<230>>; };  // NOLINT
03912 template<> struct ConwayPolynomial<233, 2> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<232>, ZPZV<3>>; };  // NOLINT
03913 template<> struct ConwayPolynomial<233, 3> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<230>>; };  // NOLINT
03914 template<> struct ConwayPolynomial<233, 4> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<158>, ZPZV<3>>; };  // NOLINT
03915 template<> struct ConwayPolynomial<233, 5> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<17>, ZPZV<230>>; };  // NOLINT
03916 template<> struct ConwayPolynomial<233, 6> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<122>, ZPZV<215>, ZPZV<32>, ZPZV<3>>; };  // NOLINT
03917 template<> struct ConwayPolynomial<233, 7> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<230>>; };  // NOLINT
03918 template<> struct ConwayPolynomial<233, 8> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<202>, ZPZV<135>, ZPZV<181>, ZPZV<3>>; };  //
      NOLINT
03919 template<> struct ConwayPolynomial<233, 9> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<56>, ZPZV<146>, ZPZV<230>>;
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      };  // NOLINT
03920 template<> struct ConwayPolynomial<233, 10> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<28>, ZPZV<71>, ZPZV<102>, ZPZV<3>, ZPZV<48>,
      ZPZV<3»; };  // NOLINT
03921 template<> struct ConwayPolynomial<233, 11> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<5>, ZPZV<230»; };  // NOLINT
03922 template<> struct ConwayPolynomial<233, 12> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<96>, ZPZV<21>, ZPZV<114>, ZPZV<31>, ZPZV<19>,
      ZPZV<216>, ZPZV<20>, ZPZV<3»; };  // NOLINT
03923 template<> struct ConwayPolynomial<233, 13> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<230»; };  // NOLINT
03924 template<> struct ConwayPolynomial<233, 17> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<230»; };  // NOLINT
03925 template<> struct ConwayPolynomial<233, 19> { using ZPZ = aerobus::zpz<233>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<25>, ZPZV<230»; };  //
      NOLINT
03926 template<> struct ConwayPolynomial<239, 1> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<232»; };  // NOLINT
03927 template<> struct ConwayPolynomial<239, 2> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<237>, ZPZV<7»; };  // NOLINT
03928 template<> struct ConwayPolynomial<239, 3> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<11>, ZPZV<232»; };  // NOLINT
03929 template<> struct ConwayPolynomial<239, 4> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<11>, ZPZV<132>, ZPZV<7»; };  // NOLINT
03930 template<> struct ConwayPolynomial<239, 5> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<232»; };  // NOLINT
03931 template<> struct ConwayPolynomial<239, 6> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<237>, ZPZV<60>, ZPZV<200>, ZPZV<7»; };  // NOLINT
03932 template<> struct ConwayPolynomial<239, 7> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<17>, ZPZV<232»; };  // NOLINT
03933 template<> struct ConwayPolynomial<239, 8> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<201>, ZPZV<202>, ZPZV<54>, ZPZV<7»; };  //
      NOLINT
03934 template<> struct ConwayPolynomial<239, 9> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<2>, ZPZV<88>, ZPZV<232»; };
      // NOLINT
03935 template<> struct ConwayPolynomial<239, 10> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<57>, ZPZV<68>, ZPZV<226>, ZPZV<127>,
      ZPZV<108>, ZPZV<7»; };  // NOLINT
03936 template<> struct ConwayPolynomial<239, 11> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<8>, ZPZV<232»; };  // NOLINT
03937 template<> struct ConwayPolynomial<239, 12> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<235>, ZPZV<14>, ZPZV<113>, ZPZV<182>,
      ZPZV<101>, ZPZV<81>, ZPZV<216>, ZPZV<7»; };  // NOLINT
03938 template<> struct ConwayPolynomial<239, 13> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<232»; };  // NOLINT
03939 template<> struct ConwayPolynomial<239, 17> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<232»; };  // NOLINT
03940 template<> struct ConwayPolynomial<239, 19> { using ZPZ = aerobus::zpz<239>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<24>, ZPZV<232»; };  //
      NOLINT
03941 template<> struct ConwayPolynomial<241, 1> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<234»; };  // NOLINT
03942 template<> struct ConwayPolynomial<241, 2> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<238>, ZPZV<7»; };  // NOLINT
03943 template<> struct ConwayPolynomial<241, 3> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<234»; };  // NOLINT
03944 template<> struct ConwayPolynomial<241, 4> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<14>, ZPZV<152>, ZPZV<7»; };  // NOLINT
03945 template<> struct ConwayPolynomial<241, 5> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<234»; };  // NOLINT
03946 template<> struct ConwayPolynomial<241, 6> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<83>, ZPZV<6>, ZPZV<5>, ZPZV<7»; };  // NOLINT
03947 template<> struct ConwayPolynomial<241, 7> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<234»; };  // NOLINT
03948 template<> struct ConwayPolynomial<241, 8> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<173>, ZPZV<212>, ZPZV<153>, ZPZV<7»; };  //
      NOLINT
03949 template<> struct ConwayPolynomial<241, 9> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<236>, ZPZV<125>, ZPZV<234»;
      };  // NOLINT
03950 template<> struct ConwayPolynomial<241, 10> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<29>, ZPZV<27>, ZPZV<145>, ZPZV<208>, ZPZV<55>,
      ZPZV<7»; };  // NOLINT
03951 template<> struct ConwayPolynomial<241, 11> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<3>, ZPZV<234»; };  // NOLINT
03952 template<> struct ConwayPolynomial<241, 12> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<42>, ZPZV<10>, ZPZV<109>, ZPZV<168>, ZPZV<22>,
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      ZPZV<197>, ZPZV<17>, ZPZV<7»; };  // NOLINT
03953 template<> struct ConwayPolynomial<241, 13> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<234»; };  // NOLINT
03954 template<> struct ConwayPolynomial<241, 17> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<234»; };  // NOLINT
03955 template<> struct ConwayPolynomial<241, 19> { using ZPZ = aerobus::zpz<241>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<234»; };  //
      NOLINT
03956 template<> struct ConwayPolynomial<251, 1> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<245»; };  // NOLINT
03957 template<> struct ConwayPolynomial<251, 2> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<242>, ZPZV<6»; };  // NOLINT
03958 template<> struct ConwayPolynomial<251, 3> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<245»; };  // NOLINT
03959 template<> struct ConwayPolynomial<251, 4> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<200>, ZPZV<6»; };  // NOLINT
03960 template<> struct ConwayPolynomial<251, 5> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<245»; };  // NOLINT
03961 template<> struct ConwayPolynomial<251, 6> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<247>, ZPZV<151>, ZPZV<179>, ZPZV<6»; };  // NOLINT
03962 template<> struct ConwayPolynomial<251, 7> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<245»; };  // NOLINT
03963 template<> struct ConwayPolynomial<251, 8> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<142>, ZPZV<215>, ZPZV<173>, ZPZV<6»; };  //
      NOLINT
03964 template<> struct ConwayPolynomial<251, 9> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<187>, ZPZV<106>, ZPZV<245»;
      };  // NOLINT
03965 template<> struct ConwayPolynomial<251, 10> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<138>, ZPZV<110>, ZPZV<45>, ZPZV<34>,
      ZPZV<149>, ZPZV<6»; };  // NOLINT
03966 template<> struct ConwayPolynomial<251, 11> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<26>, ZPZV<245»; };  // NOLINT
03967 template<> struct ConwayPolynomial<251, 12> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<192>, ZPZV<53>, ZPZV<20>, ZPZV<20>, ZPZV<15>,
      ZPZV<201>, ZPZV<232>, ZPZV<6»; };  // NOLINT
03968 template<> struct ConwayPolynomial<251, 13> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<245»; };  // NOLINT
03969 template<> struct ConwayPolynomial<251, 17> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<245»; };  // NOLINT
03970 template<> struct ConwayPolynomial<251, 19> { using ZPZ = aerobus::zpz<251>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<245»; };  //
      NOLINT
03971 template<> struct ConwayPolynomial<257, 1> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<254»; };  // NOLINT
03972 template<> struct ConwayPolynomial<257, 2> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<251>, ZPZV<3»; };  // NOLINT
03973 template<> struct ConwayPolynomial<257, 3> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<254»; };  // NOLINT
03974 template<> struct ConwayPolynomial<257, 4> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<16>, ZPZV<187>, ZPZV<3»; };  // NOLINT
03975 template<> struct ConwayPolynomial<257, 5> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<254»; };  // NOLINT
03976 template<> struct ConwayPolynomial<257, 6> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<62>, ZPZV<18>, ZPZV<138>, ZPZV<3»; };  // NOLINT
03977 template<> struct ConwayPolynomial<257, 7> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<31>, ZPZV<254»; };  // NOLINT
03978 template<> struct ConwayPolynomial<257, 8> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<179>, ZPZV<140>, ZPZV<162>, ZPZV<3»; };  //
      NOLINT
03979 template<> struct ConwayPolynomial<257, 9> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<201>, ZPZV<50>, ZPZV<254»;
      };  // NOLINT
03980 template<> struct ConwayPolynomial<257, 10> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<97>, ZPZV<12>, ZPZV<225>, ZPZV<180>, ZPZV<20>,
      ZPZV<3»; };  // NOLINT
03981 template<> struct ConwayPolynomial<257, 11> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<40>, ZPZV<254»; };  // NOLINT
03982 template<> struct ConwayPolynomial<257, 12> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<13>, ZPZV<225>, ZPZV<215>, ZPZV<173>,
      ZPZV<249>, ZPZV<148>, ZPZV<20>, ZPZV<3»; };  // NOLINT
03983 template<> struct ConwayPolynomial<257, 13> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<254»; };  // NOLINT
03984 template<> struct ConwayPolynomial<257, 17> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<254»; };  // NOLINT
03985 template<> struct ConwayPolynomial<257, 19> { using ZPZ = aerobus::zpz<257>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
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      ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<254»; };  //
      NOLINT
03986 template<> struct ConwayPolynomial<263, 1> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<258»; };  // NOLINT
03987 template<> struct ConwayPolynomial<263, 2> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<261>, ZPZV<5»; };  // NOLINT
03988 template<> struct ConwayPolynomial<263, 3> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<14>, ZPZV<258»; };  // NOLINT
03989 template<> struct ConwayPolynomial<263, 4> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<171>, ZPZV<5»; };  // NOLINT
03990 template<> struct ConwayPolynomial<263, 5> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<258»; };  // NOLINT
03991 template<> struct ConwayPolynomial<263, 6> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<222>, ZPZV<250>, ZPZV<225>, ZPZV<5»; };  // NOLINT
03992 template<> struct ConwayPolynomial<263, 7> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<258»; };  // NOLINT
03993 template<> struct ConwayPolynomial<263, 8> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<227>, ZPZV<170>, ZPZV<7>, ZPZV<5»; };  //
      NOLINT
03994 template<> struct ConwayPolynomial<263, 9> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<261>, ZPZV<29>, ZPZV<258»;
      };  // NOLINT
03995 template<> struct ConwayPolynomial<263, 10> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<245>, ZPZV<231>, ZPZV<198>, ZPZV<145>,
      ZPZV<119>, ZPZV<5»; };  // NOLINT
03996 template<> struct ConwayPolynomial<263, 11> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<2>, ZPZV<258»; };  // NOLINT
03997 template<> struct ConwayPolynomial<263, 12> { using ZPZ = aerobus::zpz<263>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<172>, ZPZV<174>, ZPZV<162>, ZPZV<252>,
      ZPZV<47>, ZPZV<45>, ZPZV<180>, ZPZV<5»; };  // NOLINT
03998 template<> struct ConwayPolynomial<269, 1> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<267»; };  // NOLINT
03999 template<> struct ConwayPolynomial<269, 2> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<268>, ZPZV<2»; };  // NOLINT
04000 template<> struct ConwayPolynomial<269, 3> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<9>, ZPZV<267»; };  // NOLINT
04001 template<> struct ConwayPolynomial<269, 4> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<262>, ZPZV<2»; };  // NOLINT
04002 template<> struct ConwayPolynomial<269, 5> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<267»; };  // NOLINT
04003 template<> struct ConwayPolynomial<269, 6> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<120>, ZPZV<101>, ZPZV<206>, ZPZV<2»; };  // NOLINT
04004 template<> struct ConwayPolynomial<269, 7> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<267»; };  // NOLINT
04005 template<> struct ConwayPolynomial<269, 8> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<220>, ZPZV<131>, ZPZV<232>, ZPZV<2»; };  //
      NOLINT
04006 template<> struct ConwayPolynomial<269, 9> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<214>, ZPZV<267>, ZPZV<267»;
      };  // NOLINT
04007 template<> struct ConwayPolynomial<269, 10> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<264>, ZPZV<243>, ZPZV<186>, ZPZV<61>,
      ZPZV<10>, ZPZV<2»; };  // NOLINT
04008 template<> struct ConwayPolynomial<269, 11> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<20>, ZPZV<267»; };  // NOLINT
04009 template<> struct ConwayPolynomial<269, 12> { using ZPZ = aerobus::zpz<269>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<126>, ZPZV<165>, ZPZV<63>, ZPZV<215>,
      ZPZV<132>, ZPZV<180>, ZPZV<150>, ZPZV<2»; };  // NOLINT
04010 template<> struct ConwayPolynomial<271, 1> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<265»; };  // NOLINT
04011 template<> struct ConwayPolynomial<271, 2> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<269>, ZPZV<6»; };  // NOLINT
04012 template<> struct ConwayPolynomial<271, 3> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<265»; };  // NOLINT
04013 template<> struct ConwayPolynomial<271, 4> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<205>, ZPZV<6»; };  // NOLINT
04014 template<> struct ConwayPolynomial<271, 5> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<265»; };  // NOLINT
04015 template<> struct ConwayPolynomial<271, 6> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<207>, ZPZV<207>, ZPZV<81>, ZPZV<6»; };  // NOLINT
04016 template<> struct ConwayPolynomial<271, 7> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<22>, ZPZV<265»; };  // NOLINT
04017 template<> struct ConwayPolynomial<271, 8> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<199>, ZPZV<114>, ZPZV<69>, ZPZV<6»; };  //
      NOLINT
04018 template<> struct ConwayPolynomial<271, 9> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<266>, ZPZV<186>, ZPZV<265»;
      };  // NOLINT
04019 template<> struct ConwayPolynomial<271, 10> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<133>, ZPZV<10>, ZPZV<256>, ZPZV<74>,
      ZPZV<126>, ZPZV<6»; };  // NOLINT
04020 template<> struct ConwayPolynomial<271, 11> { using ZPZ = aerobus::zpz<271>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<10>, ZPZV<265»; };  // NOLINT
04021 template<> struct ConwayPolynomial<271, 12> { using ZPZ = aerobus::zpz<271>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<162>, ZPZV<210>, ZPZV<116>, ZPZV<205>,
      ZPZV<237>, ZPZV<256>, ZPZV<130>, ZPZV<6>; };  // NOLINT
04022 template<> struct ConwayPolynomial<277, 1> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<272>; };  // NOLINT
04023 template<> struct ConwayPolynomial<277, 2> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<274>, ZPZV<5>; };  // NOLINT
04024 template<> struct ConwayPolynomial<277, 3> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<272>; };  // NOLINT
04025 template<> struct ConwayPolynomial<277, 4> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<222>, ZPZV<5>; };  // NOLINT
04026 template<> struct ConwayPolynomial<277, 5> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<272>; };  // NOLINT
04027 template<> struct ConwayPolynomial<277, 6> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<33>, ZPZV<9>, ZPZV<118>, ZPZV<5>; };  // NOLINT
04028 template<> struct ConwayPolynomial<277, 7> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<272>; };  // NOLINT
04029 template<> struct ConwayPolynomial<277, 8> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<187>, ZPZV<159>, ZPZV<176>, ZPZV<5>; };  //
      NOLINT
04030 template<> struct ConwayPolynomial<277, 9> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<177>, ZPZV<110>, ZPZV<272>;
      };  // NOLINT
04031 template<> struct ConwayPolynomial<277, 10> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<206>, ZPZV<253>, ZPZV<237>, ZPZV<241>,
      ZPZV<260>, ZPZV<5>; };  // NOLINT
04032 template<> struct ConwayPolynomial<277, 11> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<5>, ZPZV<272>; };  // NOLINT
04033 template<> struct ConwayPolynomial<277, 12> { using ZPZ = aerobus::zpz<277>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<183>, ZPZV<218>, ZPZV<240>, ZPZV<40>,
      ZPZV<180>, ZPZV<115>, ZPZV<202>, ZPZV<5>; };  // NOLINT
04034 template<> struct ConwayPolynomial<281, 1> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<278>; };  // NOLINT
04035 template<> struct ConwayPolynomial<281, 2> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<280>, ZPZV<3>; };  // NOLINT
04036 template<> struct ConwayPolynomial<281, 3> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<278>; };  // NOLINT
04037 template<> struct ConwayPolynomial<281, 4> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<176>, ZPZV<3>; };  // NOLINT
04038 template<> struct ConwayPolynomial<281, 5> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<278>; };  // NOLINT
04039 template<> struct ConwayPolynomial<281, 6> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<151>, ZPZV<13>, ZPZV<27>, ZPZV<3>; };  // NOLINT
04040 template<> struct ConwayPolynomial<281, 7> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<278>; };  // NOLINT
04041 template<> struct ConwayPolynomial<281, 8> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<195>, ZPZV<279>, ZPZV<140>, ZPZV<3>; };  //
      NOLINT
04042 template<> struct ConwayPolynomial<281, 9> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<148>, ZPZV<70>, ZPZV<278>;
      };  // NOLINT
04043 template<> struct ConwayPolynomial<281, 10> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<258>, ZPZV<145>, ZPZV<13>, ZPZV<138>,
      ZPZV<191>, ZPZV<3>; };  // NOLINT
04044 template<> struct ConwayPolynomial<281, 11> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<36>, ZPZV<278>; };  // NOLINT
04045 template<> struct ConwayPolynomial<281, 12> { using ZPZ = aerobus::zpz<281>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<202>, ZPZV<68>, ZPZV<103>, ZPZV<116>,
      ZPZV<58>, ZPZV<28>, ZPZV<191>, ZPZV<3>; };  // NOLINT
04046 template<> struct ConwayPolynomial<283, 1> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<280>; };  // NOLINT
04047 template<> struct ConwayPolynomial<283, 2> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<282>, ZPZV<3>; };  // NOLINT
04048 template<> struct ConwayPolynomial<283, 3> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<280>; };  // NOLINT
04049 template<> struct ConwayPolynomial<283, 4> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<238>, ZPZV<3>; };  // NOLINT
04050 template<> struct ConwayPolynomial<283, 5> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<280>; };  // NOLINT
04051 template<> struct ConwayPolynomial<283, 6> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<199>, ZPZV<68>, ZPZV<73>, ZPZV<3>; };  // NOLINT
04052 template<> struct ConwayPolynomial<283, 7> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<280>; };  // NOLINT
04053 template<> struct ConwayPolynomial<283, 8> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<179>, ZPZV<32>, ZPZV<232>, ZPZV<3>; };  //
      NOLINT
04054 template<> struct ConwayPolynomial<283, 9> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<136>, ZPZV<65>, ZPZV<280>;
      };  // NOLINT
04055 template<> struct ConwayPolynomial<283, 10> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<271>, ZPZV<185>, ZPZV<68>, ZPZV<100>,
      ZPZV<219>, ZPZV<3>; };  // NOLINT
04056 template<> struct ConwayPolynomial<283, 11> { using ZPZ = aerobus::zpz<283>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<4>, ZPZV<280>; };  // NOLINT
04057 template<> struct ConwayPolynomial<283, 12> { using ZPZ = aerobus::zpz<283>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<20>, ZPZV<8>, ZPZV<96>, ZPZV<229>, ZPZV<49>,
      ZPZV<14>, ZPZV<56>, ZPZV<3>>; };  // NOLINT
04058 template<> struct ConwayPolynomial<293, 1> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<291>>; };  // NOLINT
04059 template<> struct ConwayPolynomial<293, 2> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<292>, ZPZV<2>>; };  // NOLINT
04060 template<> struct ConwayPolynomial<293, 3> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<291>>; };  // NOLINT
04061 template<> struct ConwayPolynomial<293, 4> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<166>, ZPZV<2>>; };  // NOLINT
04062 template<> struct ConwayPolynomial<293, 5> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<291>>; };  // NOLINT
04063 template<> struct ConwayPolynomial<293, 6> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<128>, ZPZV<210>, ZPZV<260>, ZPZV<2>>; };  // NOLINT
04064 template<> struct ConwayPolynomial<293, 7> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<291>>; };  // NOLINT
04065 template<> struct ConwayPolynomial<293, 8> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<29>, ZPZV<175>, ZPZV<195>, ZPZV<239>, ZPZV<2>>; };  //
      NOLINT
04066 template<> struct ConwayPolynomial<293, 9> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<208>, ZPZV<190>, ZPZV<291>>;
      };  // NOLINT
04067 template<> struct ConwayPolynomial<293, 10> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<186>, ZPZV<28>, ZPZV<46>, ZPZV<184>, ZPZV<24>,
      ZPZV<2>>; };  // NOLINT
04068 template<> struct ConwayPolynomial<293, 11> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>,
      ZPZV<3>, ZPZV<291>>; };  // NOLINT
04069 template<> struct ConwayPolynomial<293, 12> { using ZPZ = aerobus::zpz<293>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<159>, ZPZV<210>, ZPZV<125>, ZPZV<212>,
      ZPZV<167>, ZPZV<144>, ZPZV<157>, ZPZV<2>>; };  // NOLINT
04070 template<> struct ConwayPolynomial<307, 1> { using ZPZ = aerobus::zpz<307>; using type =
      POLYV<ZPZV<1>, ZPZV<302>>; };  // NOLINT
04071 template<> struct ConwayPolynomial<307, 2> { using ZPZ = aerobus::zpz<307>; using type =
      POLYV<ZPZV<1>, ZPZV<306>, ZPZV<5>>; };  // NOLINT
04072 template<> struct ConwayPolynomial<307, 3> { using ZPZ = aerobus::zpz<307>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<302>>; };  // NOLINT
04073 template<> struct ConwayPolynomial<307, 4> { using ZPZ = aerobus::zpz<307>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<239>, ZPZV<5>>; };  // NOLINT
04074 template<> struct ConwayPolynomial<307, 5> { using ZPZ = aerobus::zpz<307>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<302>>; };  // NOLINT
04075 template<> struct ConwayPolynomial<307, 6> { using ZPZ = aerobus::zpz<307>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<213>, ZPZV<172>, ZPZV<61>, ZPZV<5>>; };  // NOLINT
04076 template<> struct ConwayPolynomial<307, 7> { using ZPZ = aerobus::zpz<307>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<302>>; };  // NOLINT
04077 template<> struct ConwayPolynomial<307, 8> { using ZPZ = aerobus::zpz<307>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<283>, ZPZV<232>, ZPZV<131>, ZPZV<5>>; };  //
      NOLINT
04078 template<> struct ConwayPolynomial<307, 9> { using ZPZ = aerobus::zpz<307>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<165>, ZPZV<70>, ZPZV<302>>;
      };  // NOLINT
04079 template<> struct ConwayPolynomial<311, 1> { using ZPZ = aerobus::zpz<311>; using type =
      POLYV<ZPZV<1>, ZPZV<294>>; };  // NOLINT
04080 template<> struct ConwayPolynomial<311, 2> { using ZPZ = aerobus::zpz<311>; using type =
      POLYV<ZPZV<1>, ZPZV<310>, ZPZV<17>>; };  // NOLINT
04081 template<> struct ConwayPolynomial<311, 3> { using ZPZ = aerobus::zpz<311>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<294>>; };  // NOLINT
04082 template<> struct ConwayPolynomial<311, 4> { using ZPZ = aerobus::zpz<311>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<163>, ZPZV<17>>; };  // NOLINT
04083 template<> struct ConwayPolynomial<311, 5> { using ZPZ = aerobus::zpz<311>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<294>>; };  // NOLINT
04084 template<> struct ConwayPolynomial<311, 6> { using ZPZ = aerobus::zpz<311>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<27>, ZPZV<167>, ZPZV<152>, ZPZV<17>>; };  // NOLINT
04085 template<> struct ConwayPolynomial<311, 7> { using ZPZ = aerobus::zpz<311>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<294>>; };  // NOLINT
04086 template<> struct ConwayPolynomial<311, 8> { using ZPZ = aerobus::zpz<311>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<162>, ZPZV<118>, ZPZV<2>, ZPZV<17>>; };  //
      NOLINT
04087 template<> struct ConwayPolynomial<311, 9> { using ZPZ = aerobus::zpz<311>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<287>, ZPZV<74>, ZPZV<294>>;
      };  // NOLINT
04088 template<> struct ConwayPolynomial<313, 1> { using ZPZ = aerobus::zpz<313>; using type =
      POLYV<ZPZV<1>, ZPZV<303>>; };  // NOLINT
04089 template<> struct ConwayPolynomial<313, 2> { using ZPZ = aerobus::zpz<313>; using type =
      POLYV<ZPZV<1>, ZPZV<310>, ZPZV<10>>; };  // NOLINT
04090 template<> struct ConwayPolynomial<313, 3> { using ZPZ = aerobus::zpz<313>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<303>>; };  // NOLINT
04091 template<> struct ConwayPolynomial<313, 4> { using ZPZ = aerobus::zpz<313>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<239>, ZPZV<10>>; };  // NOLINT
04092 template<> struct ConwayPolynomial<313, 5> { using ZPZ = aerobus::zpz<313>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<303>>; };  // NOLINT
04093 template<> struct ConwayPolynomial<313, 6> { using ZPZ = aerobus::zpz<313>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<196>, ZPZV<213>, ZPZV<253>, ZPZV<10>>; };  // NOLINT
04094 template<> struct ConwayPolynomial<313, 7> { using ZPZ = aerobus::zpz<313>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<303>>; };  // NOLINT
04095 template<> struct ConwayPolynomial<313, 8> { using ZPZ = aerobus::zpz<313>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<306>, ZPZV<99>, ZPZV<106>, ZPZV<10>>; };  //
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      NOLINT
04096 template<> struct ConwayPolynomial<313, 9> { using ZPZ = aerobus::zpz<313>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<267>, ZPZV<300>, ZPZV<303>;
      };  // NOLINT
04097 template<> struct ConwayPolynomial<317, 1> { using ZPZ = aerobus::zpz<317>; using type =
      POLYV<ZPZV<1>, ZPZV<315>; };  // NOLINT
04098 template<> struct ConwayPolynomial<317, 2> { using ZPZ = aerobus::zpz<317>; using type =
      POLYV<ZPZV<1>, ZPZV<313>, ZPZV<2>; };  // NOLINT
04099 template<> struct ConwayPolynomial<317, 3> { using ZPZ = aerobus::zpz<317>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<315>; };  // NOLINT
04100 template<> struct ConwayPolynomial<317, 4> { using ZPZ = aerobus::zpz<317>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<178>, ZPZV<2>; };  // NOLINT
04101 template<> struct ConwayPolynomial<317, 5> { using ZPZ = aerobus::zpz<317>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<315>; };  // NOLINT
04102 template<> struct ConwayPolynomial<317, 6> { using ZPZ = aerobus::zpz<317>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<195>, ZPZV<156>, ZPZV<4>, ZPZV<2>; };  // NOLINT
04103 template<> struct ConwayPolynomial<317, 7> { using ZPZ = aerobus::zpz<317>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<315>; };  // NOLINT
04104 template<> struct ConwayPolynomial<317, 8> { using ZPZ = aerobus::zpz<317>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<207>, ZPZV<85>, ZPZV<31>, ZPZV<2>; };  //
      NOLINT
04105 template<> struct ConwayPolynomial<317, 9> { using ZPZ = aerobus::zpz<317>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<284>, ZPZV<296>, ZPZV<315>;
      };  // NOLINT
04106 template<> struct ConwayPolynomial<331, 1> { using ZPZ = aerobus::zpz<331>; using type =
      POLYV<ZPZV<1>, ZPZV<328>; };  // NOLINT
04107 template<> struct ConwayPolynomial<331, 2> { using ZPZ = aerobus::zpz<331>; using type =
      POLYV<ZPZV<1>, ZPZV<326>, ZPZV<3>; };  // NOLINT
04108 template<> struct ConwayPolynomial<331, 3> { using ZPZ = aerobus::zpz<331>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<328>; };  // NOLINT
04109 template<> struct ConwayPolynomial<331, 4> { using ZPZ = aerobus::zpz<331>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<290>, ZPZV<3>; };  // NOLINT
04110 template<> struct ConwayPolynomial<331, 5> { using ZPZ = aerobus::zpz<331>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<328>; };  // NOLINT
04111 template<> struct ConwayPolynomial<331, 6> { using ZPZ = aerobus::zpz<331>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<283>, ZPZV<205>, ZPZV<159>, ZPZV<3>; };  // NOLINT
04112 template<> struct ConwayPolynomial<331, 7> { using ZPZ = aerobus::zpz<331>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<328>; };  // NOLINT
04113 template<> struct ConwayPolynomial<331, 8> { using ZPZ = aerobus::zpz<331>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<249>, ZPZV<308>, ZPZV<78>, ZPZV<3>; };  //
      NOLINT
04114 template<> struct ConwayPolynomial<331, 9> { using ZPZ = aerobus::zpz<331>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<194>, ZPZV<210>, ZPZV<328>;
      };  // NOLINT
04115 template<> struct ConwayPolynomial<337, 1> { using ZPZ = aerobus::zpz<337>; using type =
      POLYV<ZPZV<1>, ZPZV<327>; };  // NOLINT
04116 template<> struct ConwayPolynomial<337, 2> { using ZPZ = aerobus::zpz<337>; using type =
      POLYV<ZPZV<1>, ZPZV<332>, ZPZV<10>; };  // NOLINT
04117 template<> struct ConwayPolynomial<337, 3> { using ZPZ = aerobus::zpz<337>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<327>; };  // NOLINT
04118 template<> struct ConwayPolynomial<337, 4> { using ZPZ = aerobus::zpz<337>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<25>, ZPZV<224>, ZPZV<10>; };  // NOLINT
04119 template<> struct ConwayPolynomial<337, 5> { using ZPZ = aerobus::zpz<337>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<327>; };  // NOLINT
04120 template<> struct ConwayPolynomial<337, 6> { using ZPZ = aerobus::zpz<337>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<216>, ZPZV<127>, ZPZV<109>, ZPZV<10>; };  // NOLINT
04121 template<> struct ConwayPolynomial<337, 7> { using ZPZ = aerobus::zpz<337>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<327>; };  // NOLINT
04122 template<> struct ConwayPolynomial<337, 8> { using ZPZ = aerobus::zpz<337>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<331>, ZPZV<246>, ZPZV<251>, ZPZV<10>; };  //
      NOLINT
04123 template<> struct ConwayPolynomial<337, 9> { using ZPZ = aerobus::zpz<337>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<148>, ZPZV<98>, ZPZV<327>;
      };  // NOLINT
04124 template<> struct ConwayPolynomial<347, 1> { using ZPZ = aerobus::zpz<347>; using type =
      POLYV<ZPZV<1>, ZPZV<345>; };  // NOLINT
04125 template<> struct ConwayPolynomial<347, 2> { using ZPZ = aerobus::zpz<347>; using type =
      POLYV<ZPZV<1>, ZPZV<343>, ZPZV<2>; };  // NOLINT
04126 template<> struct ConwayPolynomial<347, 3> { using ZPZ = aerobus::zpz<347>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<9>, ZPZV<345>; };  // NOLINT
04127 template<> struct ConwayPolynomial<347, 4> { using ZPZ = aerobus::zpz<347>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<13>, ZPZV<295>, ZPZV<2>; };  // NOLINT
04128 template<> struct ConwayPolynomial<347, 5> { using ZPZ = aerobus::zpz<347>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<345>; };  // NOLINT
04129 template<> struct ConwayPolynomial<347, 6> { using ZPZ = aerobus::zpz<347>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<343>, ZPZV<26>, ZPZV<56>, ZPZV<2>; };  // NOLINT
04130 template<> struct ConwayPolynomial<347, 7> { using ZPZ = aerobus::zpz<347>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<345>; };  // NOLINT
04131 template<> struct ConwayPolynomial<347, 8> { using ZPZ = aerobus::zpz<347>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<187>, ZPZV<213>, ZPZV<117>, ZPZV<2>; };  //
      NOLINT
04132 template<> struct ConwayPolynomial<347, 9> { using ZPZ = aerobus::zpz<347>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<235>, ZPZV<252>, ZPZV<345>;
      };  // NOLINT
04133 template<> struct ConwayPolynomial<349, 1> { using ZPZ = aerobus::zpz<349>; using type =
      POLYV<ZPZV<1>, ZPZV<347>; };  // NOLINT
04134 template<> struct ConwayPolynomial<349, 2> { using ZPZ = aerobus::zpz<349>; using type =
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      POLYV<ZPZV<1>, ZPZV<348>, ZPZV<2»; };  // NOLINT
04135 template<> struct ConwayPolynomial<349, 3> { using ZPZ = aerobus::zpz<349>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<347»; };  // NOLINT
04136 template<> struct ConwayPolynomial<349, 4> { using ZPZ = aerobus::zpz<349>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<279>, ZPZV<2»; };  // NOLINT
04137 template<> struct ConwayPolynomial<349, 5> { using ZPZ = aerobus::zpz<349>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<347»; };  // NOLINT
04138 template<> struct ConwayPolynomial<349, 6> { using ZPZ = aerobus::zpz<349>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<135>, ZPZV<177>, ZPZV<316>, ZPZV<2»; };  // NOLINT
04139 template<> struct ConwayPolynomial<349, 7> { using ZPZ = aerobus::zpz<349>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<347»; };  // NOLINT
04140 template<> struct ConwayPolynomial<349, 8> { using ZPZ = aerobus::zpz<349>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<308>, ZPZV<328>, ZPZV<268>, ZPZV<2»; };  //
      NOLINT
04141 template<> struct ConwayPolynomial<349, 9> { using ZPZ = aerobus::zpz<349>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<36>, ZPZV<290>, ZPZV<130>, ZPZV<347»;
      };  // NOLINT
04142 template<> struct ConwayPolynomial<353, 1> { using ZPZ = aerobus::zpz<353>; using type =
      POLYV<ZPZV<1>, ZPZV<350»; };  // NOLINT
04143 template<> struct ConwayPolynomial<353, 2> { using ZPZ = aerobus::zpz<353>; using type =
      POLYV<ZPZV<1>, ZPZV<348>, ZPZV<3»; };  // NOLINT
04144 template<> struct ConwayPolynomial<353, 3> { using ZPZ = aerobus::zpz<353>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<350»; };  // NOLINT
04145 template<> struct ConwayPolynomial<353, 4> { using ZPZ = aerobus::zpz<353>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<199>, ZPZV<3»; };  // NOLINT
04146 template<> struct ConwayPolynomial<353, 5> { using ZPZ = aerobus::zpz<353>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<350»; };  // NOLINT
04147 template<> struct ConwayPolynomial<353, 6> { using ZPZ = aerobus::zpz<353>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<215>, ZPZV<226>, ZPZV<295>, ZPZV<3»; };  // NOLINT
04148 template<> struct ConwayPolynomial<353, 7> { using ZPZ = aerobus::zpz<353>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<16>, ZPZV<350»; };  // NOLINT
04149 template<> struct ConwayPolynomial<353, 8> { using ZPZ = aerobus::zpz<353>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<182>, ZPZV<26>, ZPZV<37>, ZPZV<3»; };  //
      NOLINT
04150 template<> struct ConwayPolynomial<353, 9> { using ZPZ = aerobus::zpz<353>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<319>, ZPZV<49>, ZPZV<350»;
      };  // NOLINT
04151 template<> struct ConwayPolynomial<359, 1> { using ZPZ = aerobus::zpz<359>; using type =
      POLYV<ZPZV<1>, ZPZV<352»; };  // NOLINT
04152 template<> struct ConwayPolynomial<359, 2> { using ZPZ = aerobus::zpz<359>; using type =
      POLYV<ZPZV<1>, ZPZV<358>, ZPZV<7»; };  // NOLINT
04153 template<> struct ConwayPolynomial<359, 3> { using ZPZ = aerobus::zpz<359>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<352»; };  // NOLINT
04154 template<> struct ConwayPolynomial<359, 4> { using ZPZ = aerobus::zpz<359>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<229>, ZPZV<7»; };  // NOLINT
04155 template<> struct ConwayPolynomial<359, 5> { using ZPZ = aerobus::zpz<359>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<352»; };  // NOLINT
04156 template<> struct ConwayPolynomial<359, 6> { using ZPZ = aerobus::zpz<359>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<309>, ZPZV<327>, ZPZV<327>, ZPZV<7»; };  // NOLINT
04157 template<> struct ConwayPolynomial<359, 7> { using ZPZ = aerobus::zpz<359>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<352»; };  // NOLINT
04158 template<> struct ConwayPolynomial<359, 8> { using ZPZ = aerobus::zpz<359>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<301>, ZPZV<143>, ZPZV<271>, ZPZV<7»; };  //
      NOLINT
04159 template<> struct ConwayPolynomial<359, 9> { using ZPZ = aerobus::zpz<359>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<356>, ZPZV<165>, ZPZV<352»;
      };  // NOLINT
04160 template<> struct ConwayPolynomial<367, 1> { using ZPZ = aerobus::zpz<367>; using type =
      POLYV<ZPZV<1>, ZPZV<361»; };  // NOLINT
04161 template<> struct ConwayPolynomial<367, 2> { using ZPZ = aerobus::zpz<367>; using type =
      POLYV<ZPZV<1>, ZPZV<366>, ZPZV<6»; };  // NOLINT
04162 template<> struct ConwayPolynomial<367, 3> { using ZPZ = aerobus::zpz<367>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<10>, ZPZV<361»; };  // NOLINT
04163 template<> struct ConwayPolynomial<367, 4> { using ZPZ = aerobus::zpz<367>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<295>, ZPZV<6»; };  // NOLINT
04164 template<> struct ConwayPolynomial<367, 5> { using ZPZ = aerobus::zpz<367>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<361»; };  // NOLINT
04165 template<> struct ConwayPolynomial<367, 6> { using ZPZ = aerobus::zpz<367>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<222>, ZPZV<321>, ZPZV<324>, ZPZV<6»; };  // NOLINT
04166 template<> struct ConwayPolynomial<367, 7> { using ZPZ = aerobus::zpz<367>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<361»; };  // NOLINT
04167 template<> struct ConwayPolynomial<367, 8> { using ZPZ = aerobus::zpz<367>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<335>, ZPZV<282>, ZPZV<50>, ZPZV<6»; };  //
      NOLINT
04168 template<> struct ConwayPolynomial<367, 9> { using ZPZ = aerobus::zpz<367>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<213>, ZPZV<268>, ZPZV<361»;
      };  // NOLINT
04169 template<> struct ConwayPolynomial<373, 1> { using ZPZ = aerobus::zpz<373>; using type =
      POLYV<ZPZV<1>, ZPZV<371»; };  // NOLINT
04170 template<> struct ConwayPolynomial<373, 2> { using ZPZ = aerobus::zpz<373>; using type =
      POLYV<ZPZV<1>, ZPZV<369>, ZPZV<2»; };  // NOLINT
04171 template<> struct ConwayPolynomial<373, 3> { using ZPZ = aerobus::zpz<373>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<371»; };  // NOLINT
04172 template<> struct ConwayPolynomial<373, 4> { using ZPZ = aerobus::zpz<373>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<15>, ZPZV<304>, ZPZV<2»; };  // NOLINT
04173 template<> struct ConwayPolynomial<373, 5> { using ZPZ = aerobus::zpz<373>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<371»; };  // NOLINT
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04174 template<> struct ConwayPolynomial<373, 6> { using ZPZ = aerobus::zpz<373>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<126>, ZPZV<83>, ZPZV<108>, ZPZV<2>>; };  // NOLINT
04175 template<> struct ConwayPolynomial<373, 7> { using ZPZ = aerobus::zpz<373>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<371>>; };  // NOLINT
04176 template<> struct ConwayPolynomial<373, 8> { using ZPZ = aerobus::zpz<373>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<203>, ZPZV<219>, ZPZV<66>, ZPZV<2>>; };  //
      NOLINT
04177 template<> struct ConwayPolynomial<373, 9> { using ZPZ = aerobus::zpz<373>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<238>, ZPZV<370>, ZPZV<371>>;
      };  // NOLINT
04178 template<> struct ConwayPolynomial<379, 1> { using ZPZ = aerobus::zpz<379>; using type =
      POLYV<ZPZV<1>, ZPZV<377>>; };  // NOLINT
04179 template<> struct ConwayPolynomial<379, 2> { using ZPZ = aerobus::zpz<379>; using type =
      POLYV<ZPZV<1>, ZPZV<374>, ZPZV<2>>; };  // NOLINT
04180 template<> struct ConwayPolynomial<379, 3> { using ZPZ = aerobus::zpz<379>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<377>>; };  // NOLINT
04181 template<> struct ConwayPolynomial<379, 4> { using ZPZ = aerobus::zpz<379>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<327>, ZPZV<2>>; };  // NOLINT
04182 template<> struct ConwayPolynomial<379, 5> { using ZPZ = aerobus::zpz<379>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<377>>; };  // NOLINT
04183 template<> struct ConwayPolynomial<379, 6> { using ZPZ = aerobus::zpz<379>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<374>, ZPZV<364>, ZPZV<246>, ZPZV<2>>; };  // NOLINT
04184 template<> struct ConwayPolynomial<379, 7> { using ZPZ = aerobus::zpz<379>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<377>>; };  // NOLINT
04185 template<> struct ConwayPolynomial<379, 8> { using ZPZ = aerobus::zpz<379>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<210>, ZPZV<194>, ZPZV<173>, ZPZV<2>>; };  //
      NOLINT
04186 template<> struct ConwayPolynomial<379, 9> { using ZPZ = aerobus::zpz<379>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<362>, ZPZV<369>, ZPZV<377>>;
      };  // NOLINT
04187 template<> struct ConwayPolynomial<383, 1> { using ZPZ = aerobus::zpz<383>; using type =
      POLYV<ZPZV<1>, ZPZV<378>>; };  // NOLINT
04188 template<> struct ConwayPolynomial<383, 2> { using ZPZ = aerobus::zpz<383>; using type =
      POLYV<ZPZV<1>, ZPZV<382>, ZPZV<5>>; };  // NOLINT
04189 template<> struct ConwayPolynomial<383, 3> { using ZPZ = aerobus::zpz<383>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<378>>; };  // NOLINT
04190 template<> struct ConwayPolynomial<383, 4> { using ZPZ = aerobus::zpz<383>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<309>, ZPZV<5>>; };  // NOLINT
04191 template<> struct ConwayPolynomial<383, 5> { using ZPZ = aerobus::zpz<383>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<378>>; };  // NOLINT
04192 template<> struct ConwayPolynomial<383, 6> { using ZPZ = aerobus::zpz<383>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<69>, ZPZV<8>, ZPZV<158>, ZPZV<5>>; };  // NOLINT
04193 template<> struct ConwayPolynomial<383, 7> { using ZPZ = aerobus::zpz<383>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<378>>; };  // NOLINT
04194 template<> struct ConwayPolynomial<383, 8> { using ZPZ = aerobus::zpz<383>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<281>, ZPZV<332>, ZPZV<296>, ZPZV<5>>; };  //
      NOLINT
04195 template<> struct ConwayPolynomial<383, 9> { using ZPZ = aerobus::zpz<383>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<137>, ZPZV<76>, ZPZV<378>>;
      };  // NOLINT
04196 template<> struct ConwayPolynomial<389, 1> { using ZPZ = aerobus::zpz<389>; using type =
      POLYV<ZPZV<1>, ZPZV<387>>; };  // NOLINT
04197 template<> struct ConwayPolynomial<389, 2> { using ZPZ = aerobus::zpz<389>; using type =
      POLYV<ZPZV<1>, ZPZV<379>, ZPZV<2>>; };  // NOLINT
04198 template<> struct ConwayPolynomial<389, 3> { using ZPZ = aerobus::zpz<389>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<387>>; };  // NOLINT
04199 template<> struct ConwayPolynomial<389, 4> { using ZPZ = aerobus::zpz<389>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<266>, ZPZV<2>>; };  // NOLINT
04200 template<> struct ConwayPolynomial<389, 5> { using ZPZ = aerobus::zpz<389>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<387>>; };  // NOLINT
04201 template<> struct ConwayPolynomial<389, 6> { using ZPZ = aerobus::zpz<389>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<218>, ZPZV<339>, ZPZV<255>, ZPZV<2>>; };  // NOLINT
04202 template<> struct ConwayPolynomial<389, 7> { using ZPZ = aerobus::zpz<389>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<24>, ZPZV<387>>; };  // NOLINT
04203 template<> struct ConwayPolynomial<389, 8> { using ZPZ = aerobus::zpz<389>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<351>, ZPZV<19>, ZPZV<290>, ZPZV<2>>; };  //
      NOLINT
04204 template<> struct ConwayPolynomial<389, 9> { using ZPZ = aerobus::zpz<389>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<258>, ZPZV<308>, ZPZV<387>>;
      };  // NOLINT
04205 template<> struct ConwayPolynomial<397, 1> { using ZPZ = aerobus::zpz<397>; using type =
      POLYV<ZPZV<1>, ZPZV<392>>; };  // NOLINT
04206 template<> struct ConwayPolynomial<397, 2> { using ZPZ = aerobus::zpz<397>; using type =
      POLYV<ZPZV<1>, ZPZV<392>, ZPZV<5>>; };  // NOLINT
04207 template<> struct ConwayPolynomial<397, 3> { using ZPZ = aerobus::zpz<397>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<392>>; };  // NOLINT
04208 template<> struct ConwayPolynomial<397, 4> { using ZPZ = aerobus::zpz<397>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<12>, ZPZV<363>, ZPZV<5>>; };  // NOLINT
04209 template<> struct ConwayPolynomial<397, 5> { using ZPZ = aerobus::zpz<397>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<392>>; };  // NOLINT
04210 template<> struct ConwayPolynomial<397, 6> { using ZPZ = aerobus::zpz<397>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<382>, ZPZV<274>, ZPZV<287>, ZPZV<5>>; };  // NOLINT
04211 template<> struct ConwayPolynomial<397, 7> { using ZPZ = aerobus::zpz<397>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<392>>; };  // NOLINT
04212 template<> struct ConwayPolynomial<397, 8> { using ZPZ = aerobus::zpz<397>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<375>, ZPZV<255>, ZPZV<203>, ZPZV<5>>; };  //
      NOLINT
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04213 template<> struct ConwayPolynomial<397, 9> { using ZPZ = aerobus::zpz<397>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<166>, ZPZV<252>, ZPZV<392>;
      };  // NOLINT
04214 template<> struct ConwayPolynomial<401, 1> { using ZPZ = aerobus::zpz<401>; using type =
      POLYV<ZPZV<1>, ZPZV<398>; };  // NOLINT
04215 template<> struct ConwayPolynomial<401, 2> { using ZPZ = aerobus::zpz<401>; using type =
      POLYV<ZPZV<1>, ZPZV<396>, ZPZV<3>; };  // NOLINT
04216 template<> struct ConwayPolynomial<401, 3> { using ZPZ = aerobus::zpz<401>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<398>; };  // NOLINT
04217 template<> struct ConwayPolynomial<401, 4> { using ZPZ = aerobus::zpz<401>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<372>, ZPZV<3>; };  // NOLINT
04218 template<> struct ConwayPolynomial<401, 5> { using ZPZ = aerobus::zpz<401>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<398>; };  // NOLINT
04219 template<> struct ConwayPolynomial<401, 6> { using ZPZ = aerobus::zpz<401>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<115>, ZPZV<81>, ZPZV<51>, ZPZV<3>; };  // NOLINT
04220 template<> struct ConwayPolynomial<401, 7> { using ZPZ = aerobus::zpz<401>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<398>; };  // NOLINT
04221 template<> struct ConwayPolynomial<401, 8> { using ZPZ = aerobus::zpz<401>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<380>, ZPZV<113>, ZPZV<164>, ZPZV<3>; };  //
      NOLINT
04222 template<> struct ConwayPolynomial<401, 9> { using ZPZ = aerobus::zpz<401>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<199>, ZPZV<158>, ZPZV<398>;
      };  // NOLINT
04223 template<> struct ConwayPolynomial<409, 1> { using ZPZ = aerobus::zpz<409>; using type =
      POLYV<ZPZV<1>, ZPZV<388>; };  // NOLINT
04224 template<> struct ConwayPolynomial<409, 2> { using ZPZ = aerobus::zpz<409>; using type =
      POLYV<ZPZV<1>, ZPZV<404>, ZPZV<21>; };  // NOLINT
04225 template<> struct ConwayPolynomial<409, 3> { using ZPZ = aerobus::zpz<409>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<388>; };  // NOLINT
04226 template<> struct ConwayPolynomial<409, 4> { using ZPZ = aerobus::zpz<409>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<12>, ZPZV<407>, ZPZV<21>; };  // NOLINT
04227 template<> struct ConwayPolynomial<409, 5> { using ZPZ = aerobus::zpz<409>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<388>; };  // NOLINT
04228 template<> struct ConwayPolynomial<409, 6> { using ZPZ = aerobus::zpz<409>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<372>, ZPZV<53>, ZPZV<364>, ZPZV<21>; };  // NOLINT
04229 template<> struct ConwayPolynomial<409, 7> { using ZPZ = aerobus::zpz<409>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<388>; };  // NOLINT
04230 template<> struct ConwayPolynomial<409, 8> { using ZPZ = aerobus::zpz<409>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<256>, ZPZV<69>, ZPZV<396>, ZPZV<21>; };  //
      NOLINT
04231 template<> struct ConwayPolynomial<409, 9> { using ZPZ = aerobus::zpz<409>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<318>, ZPZV<211>, ZPZV<388>;
      };  // NOLINT
04232 template<> struct ConwayPolynomial<419, 1> { using ZPZ = aerobus::zpz<419>; using type =
      POLYV<ZPZV<1>, ZPZV<417>; };  // NOLINT
04233 template<> struct ConwayPolynomial<419, 2> { using ZPZ = aerobus::zpz<419>; using type =
      POLYV<ZPZV<1>, ZPZV<418>, ZPZV<2>; };  // NOLINT
04234 template<> struct ConwayPolynomial<419, 3> { using ZPZ = aerobus::zpz<419>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<11>, ZPZV<417>; };  // NOLINT
04235 template<> struct ConwayPolynomial<419, 4> { using ZPZ = aerobus::zpz<419>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<373>, ZPZV<2>; };  // NOLINT
04236 template<> struct ConwayPolynomial<419, 5> { using ZPZ = aerobus::zpz<419>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<417>; };  // NOLINT
04237 template<> struct ConwayPolynomial<419, 6> { using ZPZ = aerobus::zpz<419>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<411>, ZPZV<33>, ZPZV<257>, ZPZV<2>; };  // NOLINT
04238 template<> struct ConwayPolynomial<419, 7> { using ZPZ = aerobus::zpz<419>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<417>; };  // NOLINT
04239 template<> struct ConwayPolynomial<419, 8> { using ZPZ = aerobus::zpz<419>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<234>, ZPZV<388>, ZPZV<151>, ZPZV<2>; };  //
      NOLINT
04240 template<> struct ConwayPolynomial<419, 9> { using ZPZ = aerobus::zpz<419>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<93>, ZPZV<386>, ZPZV<417>;
      };  // NOLINT
04241 template<> struct ConwayPolynomial<421, 1> { using ZPZ = aerobus::zpz<421>; using type =
      POLYV<ZPZV<1>, ZPZV<419>; };  // NOLINT
04242 template<> struct ConwayPolynomial<421, 2> { using ZPZ = aerobus::zpz<421>; using type =
      POLYV<ZPZV<1>, ZPZV<417>, ZPZV<2>; };  // NOLINT
04243 template<> struct ConwayPolynomial<421, 3> { using ZPZ = aerobus::zpz<421>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<419>; };  // NOLINT
04244 template<> struct ConwayPolynomial<421, 4> { using ZPZ = aerobus::zpz<421>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<10>, ZPZV<257>, ZPZV<2>; };  // NOLINT
04245 template<> struct ConwayPolynomial<421, 5> { using ZPZ = aerobus::zpz<421>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<419>; };  // NOLINT
04246 template<> struct ConwayPolynomial<421, 6> { using ZPZ = aerobus::zpz<421>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<111>, ZPZV<342>, ZPZV<41>, ZPZV<2>; };  // NOLINT
04247 template<> struct ConwayPolynomial<421, 7> { using ZPZ = aerobus::zpz<421>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<21>, ZPZV<419>; };  // NOLINT
04248 template<> struct ConwayPolynomial<421, 8> { using ZPZ = aerobus::zpz<421>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<389>, ZPZV<32>, ZPZV<77>, ZPZV<2>; };  //
      NOLINT
04249 template<> struct ConwayPolynomial<421, 9> { using ZPZ = aerobus::zpz<421>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<18>, ZPZV<394>, ZPZV<145>, ZPZV<419>;
      };  // NOLINT
04250 template<> struct ConwayPolynomial<431, 1> { using ZPZ = aerobus::zpz<431>; using type =
      POLYV<ZPZV<1>, ZPZV<424>; };  // NOLINT
04251 template<> struct ConwayPolynomial<431, 2> { using ZPZ = aerobus::zpz<431>; using type =
      POLYV<ZPZV<1>, ZPZV<430>, ZPZV<7>; };  // NOLINT
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04252 template<> struct ConwayPolynomial<431, 3> { using ZPZ = aerobus::zpz<431>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<424>>; };  // NOLINT
04253 template<> struct ConwayPolynomial<431, 4> { using ZPZ = aerobus::zpz<431>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<323>, ZPZV<7>>; };  // NOLINT
04254 template<> struct ConwayPolynomial<431, 5> { using ZPZ = aerobus::zpz<431>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<424>>; };  // NOLINT
04255 template<> struct ConwayPolynomial<431, 6> { using ZPZ = aerobus::zpz<431>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<161>, ZPZV<202>, ZPZV<182>, ZPZV<7>>; };  // NOLINT
04256 template<> struct ConwayPolynomial<431, 7> { using ZPZ = aerobus::zpz<431>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<424>>; };  // NOLINT
04257 template<> struct ConwayPolynomial<431, 8> { using ZPZ = aerobus::zpz<431>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<243>, ZPZV<286>, ZPZV<115>, ZPZV<7>>; };  //
      NOLINT
04258 template<> struct ConwayPolynomial<431, 9> { using ZPZ = aerobus::zpz<431>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<71>, ZPZV<329>, ZPZV<424>>;
      };  // NOLINT
04259 template<> struct ConwayPolynomial<433, 1> { using ZPZ = aerobus::zpz<433>; using type =
      POLYV<ZPZV<1>, ZPZV<428>>; };  // NOLINT
04260 template<> struct ConwayPolynomial<433, 2> { using ZPZ = aerobus::zpz<433>; using type =
      POLYV<ZPZV<1>, ZPZV<432>, ZPZV<5>>; };  // NOLINT
04261 template<> struct ConwayPolynomial<433, 3> { using ZPZ = aerobus::zpz<433>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<428>>; };  // NOLINT
04262 template<> struct ConwayPolynomial<433, 4> { using ZPZ = aerobus::zpz<433>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<402>, ZPZV<5>>; };  // NOLINT
04263 template<> struct ConwayPolynomial<433, 5> { using ZPZ = aerobus::zpz<433>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<428>>; };  // NOLINT
04264 template<> struct ConwayPolynomial<433, 6> { using ZPZ = aerobus::zpz<433>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<244>, ZPZV<353>, ZPZV<360>, ZPZV<5>>; };  // NOLINT
04265 template<> struct ConwayPolynomial<433, 7> { using ZPZ = aerobus::zpz<433>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<428>>; };  // NOLINT
04266 template<> struct ConwayPolynomial<433, 8> { using ZPZ = aerobus::zpz<433>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<347>, ZPZV<32>, ZPZV<39>, ZPZV<5>>; };  //
      NOLINT
04267 template<> struct ConwayPolynomial<433, 9> { using ZPZ = aerobus::zpz<433>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<27>, ZPZV<232>, ZPZV<45>, ZPZV<428>>;
      };  // NOLINT
04268 template<> struct ConwayPolynomial<439, 1> { using ZPZ = aerobus::zpz<439>; using type =
      POLYV<ZPZV<1>, ZPZV<424>>; };  // NOLINT
04269 template<> struct ConwayPolynomial<439, 2> { using ZPZ = aerobus::zpz<439>; using type =
      POLYV<ZPZV<1>, ZPZV<436>, ZPZV<15>>; };  // NOLINT
04270 template<> struct ConwayPolynomial<439, 3> { using ZPZ = aerobus::zpz<439>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<424>>; };  // NOLINT
04271 template<> struct ConwayPolynomial<439, 4> { using ZPZ = aerobus::zpz<439>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<323>, ZPZV<15>>; };  // NOLINT
04272 template<> struct ConwayPolynomial<439, 5> { using ZPZ = aerobus::zpz<439>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<424>>; };  // NOLINT
04273 template<> struct ConwayPolynomial<439, 6> { using ZPZ = aerobus::zpz<439>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<324>, ZPZV<190>, ZPZV<15>>; };  // NOLINT
04274 template<> struct ConwayPolynomial<439, 7> { using ZPZ = aerobus::zpz<439>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<424>>; };  // NOLINT
04275 template<> struct ConwayPolynomial<439, 8> { using ZPZ = aerobus::zpz<439>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<359>, ZPZV<296>, ZPZV<266>, ZPZV<15>>; };  //
      NOLINT
04276 template<> struct ConwayPolynomial<439, 9> { using ZPZ = aerobus::zpz<439>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<16>, ZPZV<342>, ZPZV<254>, ZPZV<424>>;
      };  // NOLINT
04277 template<> struct ConwayPolynomial<443, 1> { using ZPZ = aerobus::zpz<443>; using type =
      POLYV<ZPZV<1>, ZPZV<441>>; };  // NOLINT
04278 template<> struct ConwayPolynomial<443, 2> { using ZPZ = aerobus::zpz<443>; using type =
      POLYV<ZPZV<1>, ZPZV<437>, ZPZV<2>>; };  // NOLINT
04279 template<> struct ConwayPolynomial<443, 3> { using ZPZ = aerobus::zpz<443>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<441>>; };  // NOLINT
04280 template<> struct ConwayPolynomial<443, 4> { using ZPZ = aerobus::zpz<443>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<383>, ZPZV<2>>; };  // NOLINT
04281 template<> struct ConwayPolynomial<443, 5> { using ZPZ = aerobus::zpz<443>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<441>>; };  // NOLINT
04282 template<> struct ConwayPolynomial<443, 6> { using ZPZ = aerobus::zpz<443>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<298>, ZPZV<218>, ZPZV<41>, ZPZV<2>>; };  // NOLINT
04283 template<> struct ConwayPolynomial<443, 7> { using ZPZ = aerobus::zpz<443>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<441>>; };  // NOLINT
04284 template<> struct ConwayPolynomial<443, 8> { using ZPZ = aerobus::zpz<443>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<437>, ZPZV<217>, ZPZV<290>, ZPZV<2>>; };  //
      NOLINT
04285 template<> struct ConwayPolynomial<443, 9> { using ZPZ = aerobus::zpz<443>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<125>, ZPZV<109>, ZPZV<441>>;
      };  // NOLINT
04286 template<> struct ConwayPolynomial<449, 1> { using ZPZ = aerobus::zpz<449>; using type =
      POLYV<ZPZV<1>, ZPZV<446>>; };  // NOLINT
04287 template<> struct ConwayPolynomial<449, 2> { using ZPZ = aerobus::zpz<449>; using type =
      POLYV<ZPZV<1>, ZPZV<444>, ZPZV<3>>; };  // NOLINT
04288 template<> struct ConwayPolynomial<449, 3> { using ZPZ = aerobus::zpz<449>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<446>>; };  // NOLINT
04289 template<> struct ConwayPolynomial<449, 4> { using ZPZ = aerobus::zpz<449>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<249>, ZPZV<3>>; };  // NOLINT
04290 template<> struct ConwayPolynomial<449, 5> { using ZPZ = aerobus::zpz<449>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<446>>; };  // NOLINT
04291 template<> struct ConwayPolynomial<449, 6> { using ZPZ = aerobus::zpz<449>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<437>, ZPZV<293>, ZPZV<69>, ZPZV<3>>; };  // NOLINT
04292 template<> struct ConwayPolynomial<449, 7> { using ZPZ = aerobus::zpz<449>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<28>, ZPZV<446>>; };  // NOLINT
04293 template<> struct ConwayPolynomial<449, 8> { using ZPZ = aerobus::zpz<449>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<361>, ZPZV<348>, ZPZV<124>, ZPZV<3>>; };  //
      NOLINT
04294 template<> struct ConwayPolynomial<449, 9> { using ZPZ = aerobus::zpz<449>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<226>, ZPZV<9>, ZPZV<446>>; };
      // NOLINT
04295 template<> struct ConwayPolynomial<457, 1> { using ZPZ = aerobus::zpz<457>; using type =
      POLYV<ZPZV<1>, ZPZV<444>>; };  // NOLINT
04296 template<> struct ConwayPolynomial<457, 2> { using ZPZ = aerobus::zpz<457>; using type =
      POLYV<ZPZV<1>, ZPZV<454>, ZPZV<13>>; };  // NOLINT
04297 template<> struct ConwayPolynomial<457, 3> { using ZPZ = aerobus::zpz<457>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<444>>; };  // NOLINT
04298 template<> struct ConwayPolynomial<457, 4> { using ZPZ = aerobus::zpz<457>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<407>, ZPZV<13>>; };  // NOLINT
04299 template<> struct ConwayPolynomial<457, 5> { using ZPZ = aerobus::zpz<457>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<444>>; };  // NOLINT
04300 template<> struct ConwayPolynomial<457, 6> { using ZPZ = aerobus::zpz<457>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<205>, ZPZV<389>, ZPZV<266>, ZPZV<13>>; };  // NOLINT
04301 template<> struct ConwayPolynomial<457, 7> { using ZPZ = aerobus::zpz<457>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<444>>; };  // NOLINT
04302 template<> struct ConwayPolynomial<457, 8> { using ZPZ = aerobus::zpz<457>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<365>, ZPZV<296>, ZPZV<412>, ZPZV<13>>; };  //
      NOLINT
04303 template<> struct ConwayPolynomial<457, 9> { using ZPZ = aerobus::zpz<457>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<354>, ZPZV<84>, ZPZV<444>>;
      };  // NOLINT
04304 template<> struct ConwayPolynomial<461, 1> { using ZPZ = aerobus::zpz<461>; using type =
      POLYV<ZPZV<1>, ZPZV<459>>; };  // NOLINT
04305 template<> struct ConwayPolynomial<461, 2> { using ZPZ = aerobus::zpz<461>; using type =
      POLYV<ZPZV<1>, ZPZV<460>, ZPZV<2>>; };  // NOLINT
04306 template<> struct ConwayPolynomial<461, 3> { using ZPZ = aerobus::zpz<461>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<459>>; };  // NOLINT
04307 template<> struct ConwayPolynomial<461, 4> { using ZPZ = aerobus::zpz<461>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<393>, ZPZV<2>>; };  // NOLINT
04308 template<> struct ConwayPolynomial<461, 5> { using ZPZ = aerobus::zpz<461>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<459>>; };  // NOLINT
04309 template<> struct ConwayPolynomial<461, 6> { using ZPZ = aerobus::zpz<461>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<439>, ZPZV<432>, ZPZV<329>, ZPZV<2>>; };  // NOLINT
04310 template<> struct ConwayPolynomial<461, 7> { using ZPZ = aerobus::zpz<461>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<459>>; };  // NOLINT
04311 template<> struct ConwayPolynomial<461, 8> { using ZPZ = aerobus::zpz<461>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<388>, ZPZV<449>, ZPZV<321>, ZPZV<2>>; };  //
      NOLINT
04312 template<> struct ConwayPolynomial<461, 9> { using ZPZ = aerobus::zpz<461>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<210>, ZPZV<276>, ZPZV<459>>;
      };  // NOLINT
04313 template<> struct ConwayPolynomial<463, 1> { using ZPZ = aerobus::zpz<463>; using type =
      POLYV<ZPZV<1>, ZPZV<460>>; };  // NOLINT
04314 template<> struct ConwayPolynomial<463, 2> { using ZPZ = aerobus::zpz<463>; using type =
      POLYV<ZPZV<1>, ZPZV<461>, ZPZV<3>>; };  // NOLINT
04315 template<> struct ConwayPolynomial<463, 3> { using ZPZ = aerobus::zpz<463>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<10>, ZPZV<460>>; };  // NOLINT
04316 template<> struct ConwayPolynomial<463, 4> { using ZPZ = aerobus::zpz<463>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<17>, ZPZV<262>, ZPZV<3>>; };  // NOLINT
04317 template<> struct ConwayPolynomial<463, 5> { using ZPZ = aerobus::zpz<463>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<460>>; };  // NOLINT
04318 template<> struct ConwayPolynomial<463, 6> { using ZPZ = aerobus::zpz<463>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<462>, ZPZV<51>, ZPZV<110>, ZPZV<3>>; };  // NOLINT
04319 template<> struct ConwayPolynomial<463, 7> { using ZPZ = aerobus::zpz<463>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<460>>; };  // NOLINT
04320 template<> struct ConwayPolynomial<463, 8> { using ZPZ = aerobus::zpz<463>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<234>, ZPZV<414>, ZPZV<396>, ZPZV<3>>; };  //
      NOLINT
04321 template<> struct ConwayPolynomial<463, 9> { using ZPZ = aerobus::zpz<463>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<433>, ZPZV<227>, ZPZV<460>>;
      };  // NOLINT
04322 template<> struct ConwayPolynomial<467, 1> { using ZPZ = aerobus::zpz<467>; using type =
      POLYV<ZPZV<1>, ZPZV<465>>; };  // NOLINT
04323 template<> struct ConwayPolynomial<467, 2> { using ZPZ = aerobus::zpz<467>; using type =
      POLYV<ZPZV<1>, ZPZV<463>, ZPZV<2>>; };  // NOLINT
04324 template<> struct ConwayPolynomial<467, 3> { using ZPZ = aerobus::zpz<467>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<465>>; };  // NOLINT
04325 template<> struct ConwayPolynomial<467, 4> { using ZPZ = aerobus::zpz<467>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<14>, ZPZV<353>, ZPZV<2>>; };  // NOLINT
04326 template<> struct ConwayPolynomial<467, 5> { using ZPZ = aerobus::zpz<467>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<465>>; };  // NOLINT
04327 template<> struct ConwayPolynomial<467, 6> { using ZPZ = aerobus::zpz<467>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<123>, ZPZV<62>, ZPZV<237>, ZPZV<2>>; };  // NOLINT
04328 template<> struct ConwayPolynomial<467, 7> { using ZPZ = aerobus::zpz<467>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<465>>; };  // NOLINT
04329 template<> struct ConwayPolynomial<467, 8> { using ZPZ = aerobus::zpz<467>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<318>, ZPZV<413>, ZPZV<289>, ZPZV<2>>; };  //
      NOLINT
04330 template<> struct ConwayPolynomial<467, 9> { using ZPZ = aerobus::zpz<467>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<397>, ZPZV<447>, ZPZV<465»;
      };  // NOLINT
04331 template<> struct ConwayPolynomial<479, 1> { using ZPZ = aerobus::zpz<479>; using type =
      POLYV<ZPZV<1>, ZPZV<466»; };  // NOLINT
04332 template<> struct ConwayPolynomial<479, 2> { using ZPZ = aerobus::zpz<479>; using type =
      POLYV<ZPZV<1>, ZPZV<474>, ZPZV<13»; };  // NOLINT
04333 template<> struct ConwayPolynomial<479, 3> { using ZPZ = aerobus::zpz<479>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<466»; };  // NOLINT
04334 template<> struct ConwayPolynomial<479, 4> { using ZPZ = aerobus::zpz<479>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<386>, ZPZV<13»; };  // NOLINT
04335 template<> struct ConwayPolynomial<479, 5> { using ZPZ = aerobus::zpz<479>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<466»; };  // NOLINT
04336 template<> struct ConwayPolynomial<479, 6> { using ZPZ = aerobus::zpz<479>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<243>, ZPZV<287>, ZPZV<334>, ZPZV<13»; };  // NOLINT
04337 template<> struct ConwayPolynomial<479, 7> { using ZPZ = aerobus::zpz<479>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<466»; };  // NOLINT
04338 template<> struct ConwayPolynomial<479, 8> { using ZPZ = aerobus::zpz<479>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<247>, ZPZV<440>, ZPZV<17>, ZPZV<13»; };  //
      NOLINT
04339 template<> struct ConwayPolynomial<479, 9> { using ZPZ = aerobus::zpz<479>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<3>, ZPZV<185>, ZPZV<466»; };
      // NOLINT
04340 template<> struct ConwayPolynomial<487, 1> { using ZPZ = aerobus::zpz<487>; using type =
      POLYV<ZPZV<1>, ZPZV<484»; };  // NOLINT
04341 template<> struct ConwayPolynomial<487, 2> { using ZPZ = aerobus::zpz<487>; using type =
      POLYV<ZPZV<1>, ZPZV<485>, ZPZV<3»; };  // NOLINT
04342 template<> struct ConwayPolynomial<487, 3> { using ZPZ = aerobus::zpz<487>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<484»; };  // NOLINT
04343 template<> struct ConwayPolynomial<487, 4> { using ZPZ = aerobus::zpz<487>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<483>, ZPZV<3»; };  // NOLINT
04344 template<> struct ConwayPolynomial<487, 5> { using ZPZ = aerobus::zpz<487>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<484»; };  // NOLINT
04345 template<> struct ConwayPolynomial<487, 6> { using ZPZ = aerobus::zpz<487>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<450>, ZPZV<427>, ZPZV<185>, ZPZV<3»; };  // NOLINT
04346 template<> struct ConwayPolynomial<487, 7> { using ZPZ = aerobus::zpz<487>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<484»; };  // NOLINT
04347 template<> struct ConwayPolynomial<487, 8> { using ZPZ = aerobus::zpz<487>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<283>, ZPZV<249>, ZPZV<137>, ZPZV<3»; };  //
      NOLINT
04348 template<> struct ConwayPolynomial<487, 9> { using ZPZ = aerobus::zpz<487>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<271>, ZPZV<447>, ZPZV<484»;
      };  // NOLINT
04349 template<> struct ConwayPolynomial<491, 1> { using ZPZ = aerobus::zpz<491>; using type =
      POLYV<ZPZV<1>, ZPZV<489»; };  // NOLINT
04350 template<> struct ConwayPolynomial<491, 2> { using ZPZ = aerobus::zpz<491>; using type =
      POLYV<ZPZV<1>, ZPZV<487>, ZPZV<2»; };  // NOLINT
04351 template<> struct ConwayPolynomial<491, 3> { using ZPZ = aerobus::zpz<491>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<489»; };  // NOLINT
04352 template<> struct ConwayPolynomial<491, 4> { using ZPZ = aerobus::zpz<491>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<360>, ZPZV<2»; };  // NOLINT
04353 template<> struct ConwayPolynomial<491, 5> { using ZPZ = aerobus::zpz<491>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<489»; };  // NOLINT
04354 template<> struct ConwayPolynomial<491, 6> { using ZPZ = aerobus::zpz<491>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<369>, ZPZV<402>, ZPZV<125>, ZPZV<2»; };  // NOLINT
04355 template<> struct ConwayPolynomial<491, 7> { using ZPZ = aerobus::zpz<491>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<489»; };  // NOLINT
04356 template<> struct ConwayPolynomial<491, 8> { using ZPZ = aerobus::zpz<491>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<378>, ZPZV<372>, ZPZV<216>, ZPZV<2»; };  //
      NOLINT
04357 template<> struct ConwayPolynomial<491, 9> { using ZPZ = aerobus::zpz<491>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<149>, ZPZV<453>, ZPZV<489»;
      };  // NOLINT
04358 template<> struct ConwayPolynomial<499, 1> { using ZPZ = aerobus::zpz<499>; using type =
      POLYV<ZPZV<1>, ZPZV<492»; };  // NOLINT
04359 template<> struct ConwayPolynomial<499, 2> { using ZPZ = aerobus::zpz<499>; using type =
      POLYV<ZPZV<1>, ZPZV<493>, ZPZV<7»; };  // NOLINT
04360 template<> struct ConwayPolynomial<499, 3> { using ZPZ = aerobus::zpz<499>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<492»; };  // NOLINT
04361 template<> struct ConwayPolynomial<499, 4> { using ZPZ = aerobus::zpz<499>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<495>, ZPZV<7»; };  // NOLINT
04362 template<> struct ConwayPolynomial<499, 5> { using ZPZ = aerobus::zpz<499>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<17>, ZPZV<492»; };  // NOLINT
04363 template<> struct ConwayPolynomial<499, 6> { using ZPZ = aerobus::zpz<499>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<407>, ZPZV<191>, ZPZV<78>, ZPZV<7»; };  // NOLINT
04364 template<> struct ConwayPolynomial<499, 7> { using ZPZ = aerobus::zpz<499>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<492»; };  // NOLINT
04365 template<> struct ConwayPolynomial<499, 8> { using ZPZ = aerobus::zpz<499>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<288>, ZPZV<309>, ZPZV<200>, ZPZV<7»; };  //
      NOLINT
04366 template<> struct ConwayPolynomial<499, 9> { using ZPZ = aerobus::zpz<499>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<491>, ZPZV<222>, ZPZV<492»;
      };  // NOLINT
04367 template<> struct ConwayPolynomial<503, 1> { using ZPZ = aerobus::zpz<503>; using type =
      POLYV<ZPZV<1>, ZPZV<498»; };  // NOLINT
04368 template<> struct ConwayPolynomial<503, 2> { using ZPZ = aerobus::zpz<503>; using type =
      POLYV<ZPZV<1>, ZPZV<498>, ZPZV<5»; };  // NOLINT
04369 template<> struct ConwayPolynomial<503, 3> { using ZPZ = aerobus::zpz<503>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<498»; };  // NOLINT
04370 template<> struct ConwayPolynomial<503, 4> { using ZPZ = aerobus::zpz<503>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<325>, ZPZV<5»; };  // NOLINT
04371 template<> struct ConwayPolynomial<503, 5> { using ZPZ = aerobus::zpz<503>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<498»; };  // NOLINT
04372 template<> struct ConwayPolynomial<503, 6> { using ZPZ = aerobus::zpz<503>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<380>, ZPZV<292>, ZPZV<255>, ZPZV<5»; };  // NOLINT
04373 template<> struct ConwayPolynomial<503, 7> { using ZPZ = aerobus::zpz<503>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<498»; };  // NOLINT
04374 template<> struct ConwayPolynomial<503, 8> { using ZPZ = aerobus::zpz<503>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<441>, ZPZV<203>, ZPZV<316>, ZPZV<5»; };  //
      NOLINT
04375 template<> struct ConwayPolynomial<503, 9> { using ZPZ = aerobus::zpz<503>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<158>, ZPZV<337>, ZPZV<498»;
      };  // NOLINT
04376 template<> struct ConwayPolynomial<509, 1> { using ZPZ = aerobus::zpz<509>; using type =
      POLYV<ZPZV<1>, ZPZV<507»; };  // NOLINT
04377 template<> struct ConwayPolynomial<509, 2> { using ZPZ = aerobus::zpz<509>; using type =
      POLYV<ZPZV<1>, ZPZV<508>, ZPZV<2»; };  // NOLINT
04378 template<> struct ConwayPolynomial<509, 3> { using ZPZ = aerobus::zpz<509>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<507»; };  // NOLINT
04379 template<> struct ConwayPolynomial<509, 4> { using ZPZ = aerobus::zpz<509>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<408>, ZPZV<2»; };  // NOLINT
04380 template<> struct ConwayPolynomial<509, 5> { using ZPZ = aerobus::zpz<509>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<507»; };  // NOLINT
04381 template<> struct ConwayPolynomial<509, 6> { using ZPZ = aerobus::zpz<509>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<350>, ZPZV<232>, ZPZV<41>, ZPZV<2»; };  // NOLINT
04382 template<> struct ConwayPolynomial<509, 7> { using ZPZ = aerobus::zpz<509>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<507»; };  // NOLINT
04383 template<> struct ConwayPolynomial<509, 8> { using ZPZ = aerobus::zpz<509>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<420>, ZPZV<473>, ZPZV<382>, ZPZV<2»; };  //
      NOLINT
04384 template<> struct ConwayPolynomial<509, 9> { using ZPZ = aerobus::zpz<509>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<314>, ZPZV<28>, ZPZV<507»;
      };  // NOLINT
04385 template<> struct ConwayPolynomial<521, 1> { using ZPZ = aerobus::zpz<521>; using type =
      POLYV<ZPZV<1>, ZPZV<518»; };  // NOLINT
04386 template<> struct ConwayPolynomial<521, 2> { using ZPZ = aerobus::zpz<521>; using type =
      POLYV<ZPZV<1>, ZPZV<515>, ZPZV<3»; };  // NOLINT
04387 template<> struct ConwayPolynomial<521, 3> { using ZPZ = aerobus::zpz<521>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<518»; };  // NOLINT
04388 template<> struct ConwayPolynomial<521, 4> { using ZPZ = aerobus::zpz<521>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<509>, ZPZV<3»; };  // NOLINT
04389 template<> struct ConwayPolynomial<521, 5> { using ZPZ = aerobus::zpz<521>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<518»; };  // NOLINT
04390 template<> struct ConwayPolynomial<521, 6> { using ZPZ = aerobus::zpz<521>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<315>, ZPZV<153>, ZPZV<280>, ZPZV<3»; };  // NOLINT
04391 template<> struct ConwayPolynomial<521, 7> { using ZPZ = aerobus::zpz<521>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<518»; };  // NOLINT
04392 template<> struct ConwayPolynomial<521, 8> { using ZPZ = aerobus::zpz<521>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<462>, ZPZV<407>, ZPZV<312>, ZPZV<3»; };  //
      NOLINT
04393 template<> struct ConwayPolynomial<521, 9> { using ZPZ = aerobus::zpz<521>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<181>, ZPZV<483>, ZPZV<518»;
      };  // NOLINT
04394 template<> struct ConwayPolynomial<523, 1> { using ZPZ = aerobus::zpz<523>; using type =
      POLYV<ZPZV<1>, ZPZV<521»; };  // NOLINT
04395 template<> struct ConwayPolynomial<523, 2> { using ZPZ = aerobus::zpz<523>; using type =
      POLYV<ZPZV<1>, ZPZV<522>, ZPZV<2»; };  // NOLINT
04396 template<> struct ConwayPolynomial<523, 3> { using ZPZ = aerobus::zpz<523>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<521»; };  // NOLINT
04397 template<> struct ConwayPolynomial<523, 4> { using ZPZ = aerobus::zpz<523>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<382>, ZPZV<2»; };  // NOLINT
04398 template<> struct ConwayPolynomial<523, 5> { using ZPZ = aerobus::zpz<523>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<521»; };  // NOLINT
04399 template<> struct ConwayPolynomial<523, 6> { using ZPZ = aerobus::zpz<523>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<475>, ZPZV<475>, ZPZV<371>, ZPZV<2»; };  // NOLINT
04400 template<> struct ConwayPolynomial<523, 7> { using ZPZ = aerobus::zpz<523>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<521»; };  // NOLINT
04401 template<> struct ConwayPolynomial<523, 8> { using ZPZ = aerobus::zpz<523>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<518>, ZPZV<184>, ZPZV<380>, ZPZV<2»; };  //
      NOLINT
04402 template<> struct ConwayPolynomial<523, 9> { using ZPZ = aerobus::zpz<523>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<342>, ZPZV<145>, ZPZV<521»;
      };  // NOLINT
04403 template<> struct ConwayPolynomial<541, 1> { using ZPZ = aerobus::zpz<541>; using type =
      POLYV<ZPZV<1>, ZPZV<539»; };  // NOLINT
04404 template<> struct ConwayPolynomial<541, 2> { using ZPZ = aerobus::zpz<541>; using type =
      POLYV<ZPZV<1>, ZPZV<537>, ZPZV<2»; };  // NOLINT
04405 template<> struct ConwayPolynomial<541, 3> { using ZPZ = aerobus::zpz<541>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<539»; };  // NOLINT
04406 template<> struct ConwayPolynomial<541, 4> { using ZPZ = aerobus::zpz<541>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<333>, ZPZV<2»; };  // NOLINT
04407 template<> struct ConwayPolynomial<541, 5> { using ZPZ = aerobus::zpz<541>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<539»; };  // NOLINT
04408 template<> struct ConwayPolynomial<541, 6> { using ZPZ = aerobus::zpz<541>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<239>, ZPZV<320>, ZPZV<69>, ZPZV<2»; };  // NOLINT
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04409 template<> struct ConwayPolynomial<541, 7> { using ZPZ = aerobus::zpz<541>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<539>»; };  // NOLINT
04410 template<> struct ConwayPolynomial<541, 8> { using ZPZ = aerobus::zpz<541>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<376>, ZPZV<108>, ZPZV<113>, ZPZV<2>»; };  //
      NOLINT
04411 template<> struct ConwayPolynomial<541, 9> { using ZPZ = aerobus::zpz<541>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<16>, ZPZV<340>, ZPZV<318>, ZPZV<539>»;
      };  // NOLINT
04412 template<> struct ConwayPolynomial<547, 1> { using ZPZ = aerobus::zpz<547>; using type =
      POLYV<ZPZV<1>, ZPZV<545>»; };  // NOLINT
04413 template<> struct ConwayPolynomial<547, 2> { using ZPZ = aerobus::zpz<547>; using type =
      POLYV<ZPZV<1>, ZPZV<543>, ZPZV<2>»; };  // NOLINT
04414 template<> struct ConwayPolynomial<547, 3> { using ZPZ = aerobus::zpz<547>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<545>»; };  // NOLINT
04415 template<> struct ConwayPolynomial<547, 4> { using ZPZ = aerobus::zpz<547>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<334>, ZPZV<2>»; };  // NOLINT
04416 template<> struct ConwayPolynomial<547, 5> { using ZPZ = aerobus::zpz<547>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<545>»; };  // NOLINT
04417 template<> struct ConwayPolynomial<547, 6> { using ZPZ = aerobus::zpz<547>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<334>, ZPZV<153>, ZPZV<423>, ZPZV<2>»; };  // NOLINT
04418 template<> struct ConwayPolynomial<547, 7> { using ZPZ = aerobus::zpz<547>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<545>»; };  // NOLINT
04419 template<> struct ConwayPolynomial<547, 8> { using ZPZ = aerobus::zpz<547>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<368>, ZPZV<20>, ZPZV<180>, ZPZV<2>»; };  //
      NOLINT
04420 template<> struct ConwayPolynomial<547, 9> { using ZPZ = aerobus::zpz<547>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<238>, ZPZV<263>, ZPZV<545>»;
      };  // NOLINT
04421 template<> struct ConwayPolynomial<557, 1> { using ZPZ = aerobus::zpz<557>; using type =
      POLYV<ZPZV<1>, ZPZV<555>»; };  // NOLINT
04422 template<> struct ConwayPolynomial<557, 2> { using ZPZ = aerobus::zpz<557>; using type =
      POLYV<ZPZV<1>, ZPZV<553>, ZPZV<2>»; };  // NOLINT
04423 template<> struct ConwayPolynomial<557, 3> { using ZPZ = aerobus::zpz<557>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<555>»; };  // NOLINT
04424 template<> struct ConwayPolynomial<557, 4> { using ZPZ = aerobus::zpz<557>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<430>, ZPZV<2>»; };  // NOLINT
04425 template<> struct ConwayPolynomial<557, 5> { using ZPZ = aerobus::zpz<557>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<555>»; };  // NOLINT
04426 template<> struct ConwayPolynomial<557, 6> { using ZPZ = aerobus::zpz<557>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<202>, ZPZV<192>, ZPZV<253>, ZPZV<2>»; };  // NOLINT
04427 template<> struct ConwayPolynomial<557, 7> { using ZPZ = aerobus::zpz<557>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<555>»; };  // NOLINT
04428 template<> struct ConwayPolynomial<557, 8> { using ZPZ = aerobus::zpz<557>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<480>, ZPZV<384>, ZPZV<113>, ZPZV<2>»; };  //
      NOLINT
04429 template<> struct ConwayPolynomial<557, 9> { using ZPZ = aerobus::zpz<557>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<456>, ZPZV<434>, ZPZV<555>»;
      };  // NOLINT
04430 template<> struct ConwayPolynomial<563, 1> { using ZPZ = aerobus::zpz<563>; using type =
      POLYV<ZPZV<1>, ZPZV<561>»; };  // NOLINT
04431 template<> struct ConwayPolynomial<563, 2> { using ZPZ = aerobus::zpz<563>; using type =
      POLYV<ZPZV<1>, ZPZV<559>, ZPZV<2>»; };  // NOLINT
04432 template<> struct ConwayPolynomial<563, 3> { using ZPZ = aerobus::zpz<563>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<561>»; };  // NOLINT
04433 template<> struct ConwayPolynomial<563, 4> { using ZPZ = aerobus::zpz<563>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<20>, ZPZV<399>, ZPZV<2>»; };  // NOLINT
04434 template<> struct ConwayPolynomial<563, 5> { using ZPZ = aerobus::zpz<563>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<561>»; };  // NOLINT
04435 template<> struct ConwayPolynomial<563, 6> { using ZPZ = aerobus::zpz<563>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<122>, ZPZV<303>, ZPZV<246>, ZPZV<2>»; };  // NOLINT
04436 template<> struct ConwayPolynomial<563, 7> { using ZPZ = aerobus::zpz<563>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<561>»; };  // NOLINT
04437 template<> struct ConwayPolynomial<563, 8> { using ZPZ = aerobus::zpz<563>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<503>, ZPZV<176>, ZPZV<509>, ZPZV<2>»; };  //
      NOLINT
04438 template<> struct ConwayPolynomial<563, 9> { using ZPZ = aerobus::zpz<563>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<15>, ZPZV<19>, ZPZV<561>»; };
      // NOLINT
04439 template<> struct ConwayPolynomial<569, 1> { using ZPZ = aerobus::zpz<569>; using type =
      POLYV<ZPZV<1>, ZPZV<566>»; };  // NOLINT
04440 template<> struct ConwayPolynomial<569, 2> { using ZPZ = aerobus::zpz<569>; using type =
      POLYV<ZPZV<1>, ZPZV<568>, ZPZV<3>»; };  // NOLINT
04441 template<> struct ConwayPolynomial<569, 3> { using ZPZ = aerobus::zpz<569>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<566>»; };  // NOLINT
04442 template<> struct ConwayPolynomial<569, 4> { using ZPZ = aerobus::zpz<569>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<381>, ZPZV<3>»; };  // NOLINT
04443 template<> struct ConwayPolynomial<569, 5> { using ZPZ = aerobus::zpz<569>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<566>»; };  // NOLINT
04444 template<> struct ConwayPolynomial<569, 6> { using ZPZ = aerobus::zpz<569>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<50>, ZPZV<263>, ZPZV<480>, ZPZV<3>»; };  // NOLINT
04445 template<> struct ConwayPolynomial<569, 7> { using ZPZ = aerobus::zpz<569>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<566>»; };  // NOLINT
04446 template<> struct ConwayPolynomial<569, 8> { using ZPZ = aerobus::zpz<569>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<527>, ZPZV<173>, ZPZV<241>, ZPZV<3>»; };  //
      NOLINT
04447 template<> struct ConwayPolynomial<569, 9> { using ZPZ = aerobus::zpz<569>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<478>, ZPZV<566>, ZPZV<566>»;
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      };  // NOLINT
04448 template<> struct ConwayPolynomial<571, 1> { using ZPZ = aerobus::zpz<571>; using type =
      POLYV<ZPZV<1>, ZPZV<568>>; };  // NOLINT
04449 template<> struct ConwayPolynomial<571, 2> { using ZPZ = aerobus::zpz<571>; using type =
      POLYV<ZPZV<1>, ZPZV<570>, ZPZV<3>>; };  // NOLINT
04450 template<> struct ConwayPolynomial<571, 3> { using ZPZ = aerobus::zpz<571>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<568>>; };  // NOLINT
04451 template<> struct ConwayPolynomial<571, 4> { using ZPZ = aerobus::zpz<571>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<402>, ZPZV<3>>; };  // NOLINT
04452 template<> struct ConwayPolynomial<571, 5> { using ZPZ = aerobus::zpz<571>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<568>>; };  // NOLINT
04453 template<> struct ConwayPolynomial<571, 6> { using ZPZ = aerobus::zpz<571>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<221>, ZPZV<295>, ZPZV<33>, ZPZV<3>>; };  // NOLINT
04454 template<> struct ConwayPolynomial<571, 7> { using ZPZ = aerobus::zpz<571>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<568>>; };  // NOLINT
04455 template<> struct ConwayPolynomial<571, 8> { using ZPZ = aerobus::zpz<571>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<363>, ZPZV<119>, ZPZV<371>, ZPZV<3>>; };  //
      NOLINT
04456 template<> struct ConwayPolynomial<571, 9> { using ZPZ = aerobus::zpz<571>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<34>, ZPZV<545>, ZPZV<179>, ZPZV<568>>;
      };  // NOLINT
04457 template<> struct ConwayPolynomial<577, 1> { using ZPZ = aerobus::zpz<577>; using type =
      POLYV<ZPZV<1>, ZPZV<572>>; };  // NOLINT
04458 template<> struct ConwayPolynomial<577, 2> { using ZPZ = aerobus::zpz<577>; using type =
      POLYV<ZPZV<1>, ZPZV<572>, ZPZV<5>>; };  // NOLINT
04459 template<> struct ConwayPolynomial<577, 3> { using ZPZ = aerobus::zpz<577>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<572>>; };  // NOLINT
04460 template<> struct ConwayPolynomial<577, 4> { using ZPZ = aerobus::zpz<577>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<12>, ZPZV<494>, ZPZV<5>>; };  // NOLINT
04461 template<> struct ConwayPolynomial<577, 5> { using ZPZ = aerobus::zpz<577>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<572>>; };  // NOLINT
04462 template<> struct ConwayPolynomial<577, 6> { using ZPZ = aerobus::zpz<577>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<450>, ZPZV<25>, ZPZV<283>, ZPZV<5>>; };  // NOLINT
04463 template<> struct ConwayPolynomial<577, 7> { using ZPZ = aerobus::zpz<577>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<572>>; };  // NOLINT
04464 template<> struct ConwayPolynomial<577, 8> { using ZPZ = aerobus::zpz<577>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<450>, ZPZV<545>, ZPZV<321>, ZPZV<5>>; };  //
      NOLINT
04465 template<> struct ConwayPolynomial<577, 9> { using ZPZ = aerobus::zpz<577>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<17>, ZPZV<576>, ZPZV<449>, ZPZV<572>>;
      };  // NOLINT
04466 template<> struct ConwayPolynomial<587, 1> { using ZPZ = aerobus::zpz<587>; using type =
      POLYV<ZPZV<1>, ZPZV<585>>; };  // NOLINT
04467 template<> struct ConwayPolynomial<587, 2> { using ZPZ = aerobus::zpz<587>; using type =
      POLYV<ZPZV<1>, ZPZV<583>, ZPZV<2>>; };  // NOLINT
04468 template<> struct ConwayPolynomial<587, 3> { using ZPZ = aerobus::zpz<587>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<585>>; };  // NOLINT
04469 template<> struct ConwayPolynomial<587, 4> { using ZPZ = aerobus::zpz<587>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<16>, ZPZV<444>, ZPZV<2>>; };  // NOLINT
04470 template<> struct ConwayPolynomial<587, 5> { using ZPZ = aerobus::zpz<587>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<585>>; };  // NOLINT
04471 template<> struct ConwayPolynomial<587, 6> { using ZPZ = aerobus::zpz<587>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<204>, ZPZV<121>, ZPZV<226>, ZPZV<2>>; };  // NOLINT
04472 template<> struct ConwayPolynomial<587, 7> { using ZPZ = aerobus::zpz<587>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<585>>; };  // NOLINT
04473 template<> struct ConwayPolynomial<587, 8> { using ZPZ = aerobus::zpz<587>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<492>, ZPZV<44>, ZPZV<91>, ZPZV<2>>; };  //
      NOLINT
04474 template<> struct ConwayPolynomial<587, 9> { using ZPZ = aerobus::zpz<587>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<333>, ZPZV<55>, ZPZV<585>>;
      };  // NOLINT
04475 template<> struct ConwayPolynomial<593, 1> { using ZPZ = aerobus::zpz<593>; using type =
      POLYV<ZPZV<1>, ZPZV<590>>; };  // NOLINT
04476 template<> struct ConwayPolynomial<593, 2> { using ZPZ = aerobus::zpz<593>; using type =
      POLYV<ZPZV<1>, ZPZV<592>, ZPZV<3>>; };  // NOLINT
04477 template<> struct ConwayPolynomial<593, 3> { using ZPZ = aerobus::zpz<593>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<590>>; };  // NOLINT
04478 template<> struct ConwayPolynomial<593, 4> { using ZPZ = aerobus::zpz<593>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<419>, ZPZV<3>>; };  // NOLINT
04479 template<> struct ConwayPolynomial<593, 5> { using ZPZ = aerobus::zpz<593>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<590>>; };  // NOLINT
04480 template<> struct ConwayPolynomial<593, 6> { using ZPZ = aerobus::zpz<593>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<345>, ZPZV<65>, ZPZV<478>, ZPZV<3>>; };  // NOLINT
04481 template<> struct ConwayPolynomial<593, 7> { using ZPZ = aerobus::zpz<593>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<590>>; };  // NOLINT
04482 template<> struct ConwayPolynomial<593, 8> { using ZPZ = aerobus::zpz<593>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<350>, ZPZV<291>, ZPZV<495>, ZPZV<3>>; };  //
      NOLINT
04483 template<> struct ConwayPolynomial<593, 9> { using ZPZ = aerobus::zpz<593>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<223>, ZPZV<523>, ZPZV<590>>;
      };  // NOLINT
04484 template<> struct ConwayPolynomial<599, 1> { using ZPZ = aerobus::zpz<599>; using type =
      POLYV<ZPZV<1>, ZPZV<592>>; };  // NOLINT
04485 template<> struct ConwayPolynomial<599, 2> { using ZPZ = aerobus::zpz<599>; using type =
      POLYV<ZPZV<1>, ZPZV<598>, ZPZV<7>>; };  // NOLINT
04486 template<> struct ConwayPolynomial<599, 3> { using ZPZ = aerobus::zpz<599>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<592>>; };  // NOLINT
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04487 template<> struct ConwayPolynomial<599, 4> { using ZPZ = aerobus::zpz<599>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<419>, ZPZV<7»; }; // NOLINT
04488 template<> struct ConwayPolynomial<599, 5> { using ZPZ = aerobus::zpz<599>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<592»; }; // NOLINT
04489 template<> struct ConwayPolynomial<599, 6> { using ZPZ = aerobus::zpz<599>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<515>, ZPZV<274>, ZPZV<586>, ZPZV<7»; }; // NOLINT
04490 template<> struct ConwayPolynomial<599, 7> { using ZPZ = aerobus::zpz<599>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<592»; }; // NOLINT
04491 template<> struct ConwayPolynomial<599, 8> { using ZPZ = aerobus::zpz<599>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<440>, ZPZV<37>, ZPZV<124>, ZPZV<7»; }; //
      NOLINT
04492 template<> struct ConwayPolynomial<599, 9> { using ZPZ = aerobus::zpz<599>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<114>, ZPZV<98>, ZPZV<592»;
      }; // NOLINT
04493 template<> struct ConwayPolynomial<601, 1> { using ZPZ = aerobus::zpz<601>; using type =
      POLYV<ZPZV<1>, ZPZV<594»; }; // NOLINT
04494 template<> struct ConwayPolynomial<601, 2> { using ZPZ = aerobus::zpz<601>; using type =
      POLYV<ZPZV<1>, ZPZV<598>, ZPZV<7»; }; // NOLINT
04495 template<> struct ConwayPolynomial<601, 3> { using ZPZ = aerobus::zpz<601>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<594»; }; // NOLINT
04496 template<> struct ConwayPolynomial<601, 4> { using ZPZ = aerobus::zpz<601>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<14>, ZPZV<347>, ZPZV<7»; }; // NOLINT
04497 template<> struct ConwayPolynomial<601, 5> { using ZPZ = aerobus::zpz<601>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<594»; }; // NOLINT
04498 template<> struct ConwayPolynomial<601, 6> { using ZPZ = aerobus::zpz<601>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<128>, ZPZV<440>, ZPZV<49>, ZPZV<7»; }; // NOLINT
04499 template<> struct ConwayPolynomial<601, 7> { using ZPZ = aerobus::zpz<601>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<594»; }; // NOLINT
04500 template<> struct ConwayPolynomial<601, 8> { using ZPZ = aerobus::zpz<601>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<550>, ZPZV<241>, ZPZV<490>, ZPZV<7»; }; //
      NOLINT
04501 template<> struct ConwayPolynomial<601, 9> { using ZPZ = aerobus::zpz<601>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<487>, ZPZV<590>, ZPZV<594»;
      }; // NOLINT
04502 template<> struct ConwayPolynomial<607, 1> { using ZPZ = aerobus::zpz<607>; using type =
      POLYV<ZPZV<1>, ZPZV<604»; }; // NOLINT
04503 template<> struct ConwayPolynomial<607, 2> { using ZPZ = aerobus::zpz<607>; using type =
      POLYV<ZPZV<1>, ZPZV<606>, ZPZV<3»; }; // NOLINT
04504 template<> struct ConwayPolynomial<607, 3> { using ZPZ = aerobus::zpz<607>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<604»; }; // NOLINT
04505 template<> struct ConwayPolynomial<607, 4> { using ZPZ = aerobus::zpz<607>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<449>, ZPZV<3»; }; // NOLINT
04506 template<> struct ConwayPolynomial<607, 5> { using ZPZ = aerobus::zpz<607>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<604»; }; // NOLINT
04507 template<> struct ConwayPolynomial<607, 6> { using ZPZ = aerobus::zpz<607>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<45>, ZPZV<478>, ZPZV<3»; }; // NOLINT
04508 template<> struct ConwayPolynomial<607, 7> { using ZPZ = aerobus::zpz<607>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<604»; }; // NOLINT
04509 template<> struct ConwayPolynomial<607, 8> { using ZPZ = aerobus::zpz<607>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<468>, ZPZV<35>, ZPZV<449>, ZPZV<3»; }; //
      NOLINT
04510 template<> struct ConwayPolynomial<607, 9> { using ZPZ = aerobus::zpz<607>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<444>, ZPZV<129>, ZPZV<604»;
      }; // NOLINT
04511 template<> struct ConwayPolynomial<613, 1> { using ZPZ = aerobus::zpz<613>; using type =
      POLYV<ZPZV<1>, ZPZV<611»; }; // NOLINT
04512 template<> struct ConwayPolynomial<613, 2> { using ZPZ = aerobus::zpz<613>; using type =
      POLYV<ZPZV<1>, ZPZV<609>, ZPZV<2»; }; // NOLINT
04513 template<> struct ConwayPolynomial<613, 3> { using ZPZ = aerobus::zpz<613>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<611»; }; // NOLINT
04514 template<> struct ConwayPolynomial<613, 4> { using ZPZ = aerobus::zpz<613>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<12>, ZPZV<333>, ZPZV<2»; }; // NOLINT
04515 template<> struct ConwayPolynomial<613, 5> { using ZPZ = aerobus::zpz<613>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<32>, ZPZV<611»; }; // NOLINT
04516 template<> struct ConwayPolynomial<613, 6> { using ZPZ = aerobus::zpz<613>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<609>, ZPZV<595>, ZPZV<601>, ZPZV<2»; }; // NOLINT
04517 template<> struct ConwayPolynomial<613, 7> { using ZPZ = aerobus::zpz<613>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<611»; }; // NOLINT
04518 template<> struct ConwayPolynomial<613, 8> { using ZPZ = aerobus::zpz<613>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<489>, ZPZV<57>, ZPZV<539>, ZPZV<2»; }; //
      NOLINT
04519 template<> struct ConwayPolynomial<613, 9> { using ZPZ = aerobus::zpz<613>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<513>, ZPZV<536>, ZPZV<611»;
      }; // NOLINT
04520 template<> struct ConwayPolynomial<617, 1> { using ZPZ = aerobus::zpz<617>; using type =
      POLYV<ZPZV<1>, ZPZV<614»; }; // NOLINT
04521 template<> struct ConwayPolynomial<617, 2> { using ZPZ = aerobus::zpz<617>; using type =
      POLYV<ZPZV<1>, ZPZV<612>, ZPZV<3»; }; // NOLINT
04522 template<> struct ConwayPolynomial<617, 3> { using ZPZ = aerobus::zpz<617>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<614»; }; // NOLINT
04523 template<> struct ConwayPolynomial<617, 4> { using ZPZ = aerobus::zpz<617>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<503>, ZPZV<3»; }; // NOLINT
04524 template<> struct ConwayPolynomial<617, 5> { using ZPZ = aerobus::zpz<617>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<614»; }; // NOLINT
04525 template<> struct ConwayPolynomial<617, 6> { using ZPZ = aerobus::zpz<617>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<318>, ZPZV<595>, ZPZV<310>, ZPZV<3»; }; // NOLINT
04526 template<> struct ConwayPolynomial<617, 7> { using ZPZ = aerobus::zpz<617>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<614»; };  // NOLINT
04527 template<> struct ConwayPolynomial<617, 8> { using ZPZ = aerobus::zpz<617>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<519>, ZPZV<501>, ZPZV<155>, ZPZV<3»; };  //
      NOLINT
04528 template<> struct ConwayPolynomial<617, 9> { using ZPZ = aerobus::zpz<617>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<388>, ZPZV<543>, ZPZV<614»;
      };  // NOLINT
04529 template<> struct ConwayPolynomial<619, 1> { using ZPZ = aerobus::zpz<619>; using type =
      POLYV<ZPZV<1>, ZPZV<617»; };  // NOLINT
04530 template<> struct ConwayPolynomial<619, 2> { using ZPZ = aerobus::zpz<619>; using type =
      POLYV<ZPZV<1>, ZPZV<618>, ZPZV<2»; };  // NOLINT
04531 template<> struct ConwayPolynomial<619, 3> { using ZPZ = aerobus::zpz<619>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<617»; };  // NOLINT
04532 template<> struct ConwayPolynomial<619, 4> { using ZPZ = aerobus::zpz<619>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<492>, ZPZV<2»; };  // NOLINT
04533 template<> struct ConwayPolynomial<619, 5> { using ZPZ = aerobus::zpz<619>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<617»; };  // NOLINT
04534 template<> struct ConwayPolynomial<619, 6> { using ZPZ = aerobus::zpz<619>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<238>, ZPZV<468>, ZPZV<347>, ZPZV<2»; };  // NOLINT
04535 template<> struct ConwayPolynomial<619, 7> { using ZPZ = aerobus::zpz<619>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<617»; };  // NOLINT
04536 template<> struct ConwayPolynomial<619, 8> { using ZPZ = aerobus::zpz<619>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<416>, ZPZV<383>, ZPZV<225>, ZPZV<2»; };  //
      NOLINT
04537 template<> struct ConwayPolynomial<619, 9> { using ZPZ = aerobus::zpz<619>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<579>, ZPZV<310>, ZPZV<617»;
      };  // NOLINT
04538 template<> struct ConwayPolynomial<631, 1> { using ZPZ = aerobus::zpz<631>; using type =
      POLYV<ZPZV<1>, ZPZV<628»; };  // NOLINT
04539 template<> struct ConwayPolynomial<631, 2> { using ZPZ = aerobus::zpz<631>; using type =
      POLYV<ZPZV<1>, ZPZV<629>, ZPZV<3»; };  // NOLINT
04540 template<> struct ConwayPolynomial<631, 3> { using ZPZ = aerobus::zpz<631>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<628»; };  // NOLINT
04541 template<> struct ConwayPolynomial<631, 4> { using ZPZ = aerobus::zpz<631>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<376>, ZPZV<3»; };  // NOLINT
04542 template<> struct ConwayPolynomial<631, 5> { using ZPZ = aerobus::zpz<631>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<628»; };  // NOLINT
04543 template<> struct ConwayPolynomial<631, 6> { using ZPZ = aerobus::zpz<631>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<516>, ZPZV<541>, ZPZV<106>, ZPZV<3»; };  // NOLINT
04544 template<> struct ConwayPolynomial<631, 7> { using ZPZ = aerobus::zpz<631>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<628»; };  // NOLINT
04545 template<> struct ConwayPolynomial<631, 8> { using ZPZ = aerobus::zpz<631>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<379>, ZPZV<516>, ZPZV<187>, ZPZV<3»; };  //
      NOLINT
04546 template<> struct ConwayPolynomial<631, 9> { using ZPZ = aerobus::zpz<631>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<296>, ZPZV<413>, ZPZV<628»;
      };  // NOLINT
04547 template<> struct ConwayPolynomial<641, 1> { using ZPZ = aerobus::zpz<641>; using type =
      POLYV<ZPZV<1>, ZPZV<638»; };  // NOLINT
04548 template<> struct ConwayPolynomial<641, 2> { using ZPZ = aerobus::zpz<641>; using type =
      POLYV<ZPZV<1>, ZPZV<635>, ZPZV<3»; };  // NOLINT
04549 template<> struct ConwayPolynomial<641, 3> { using ZPZ = aerobus::zpz<641>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<638»; };  // NOLINT
04550 template<> struct ConwayPolynomial<641, 4> { using ZPZ = aerobus::zpz<641>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<629>, ZPZV<3»; };  // NOLINT
04551 template<> struct ConwayPolynomial<641, 5> { using ZPZ = aerobus::zpz<641>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<638»; };  // NOLINT
04552 template<> struct ConwayPolynomial<641, 6> { using ZPZ = aerobus::zpz<641>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<105>, ZPZV<557>, ZPZV<294>, ZPZV<3»; };  // NOLINT
04553 template<> struct ConwayPolynomial<641, 7> { using ZPZ = aerobus::zpz<641>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<638»; };  // NOLINT
04554 template<> struct ConwayPolynomial<641, 8> { using ZPZ = aerobus::zpz<641>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<356>, ZPZV<392>, ZPZV<332>, ZPZV<3»; };  //
      NOLINT
04555 template<> struct ConwayPolynomial<641, 9> { using ZPZ = aerobus::zpz<641>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<66>, ZPZV<141>, ZPZV<638»;
      };  // NOLINT
04556 template<> struct ConwayPolynomial<643, 1> { using ZPZ = aerobus::zpz<643>; using type =
      POLYV<ZPZV<1>, ZPZV<632»; };  // NOLINT
04557 template<> struct ConwayPolynomial<643, 2> { using ZPZ = aerobus::zpz<643>; using type =
      POLYV<ZPZV<1>, ZPZV<641>, ZPZV<11»; };  // NOLINT
04558 template<> struct ConwayPolynomial<643, 3> { using ZPZ = aerobus::zpz<643>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<632»; };  // NOLINT
04559 template<> struct ConwayPolynomial<643, 4> { using ZPZ = aerobus::zpz<643>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<600>, ZPZV<11»; };  // NOLINT
04560 template<> struct ConwayPolynomial<643, 5> { using ZPZ = aerobus::zpz<643>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<632»; };  // NOLINT
04561 template<> struct ConwayPolynomial<643, 6> { using ZPZ = aerobus::zpz<643>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<345>, ZPZV<412>, ZPZV<293>, ZPZV<11»; };  // NOLINT
04562 template<> struct ConwayPolynomial<643, 7> { using ZPZ = aerobus::zpz<643>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<632»; };  // NOLINT
04563 template<> struct ConwayPolynomial<643, 8> { using ZPZ = aerobus::zpz<643>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<631>, ZPZV<573>, ZPZV<569>, ZPZV<11»; };  //
      NOLINT
04564 template<> struct ConwayPolynomial<643, 9> { using ZPZ = aerobus::zpz<643>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<591>, ZPZV<475>, ZPZV<632»;
      };  // NOLINT
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04565 template<> struct ConwayPolynomial<647, 1> { using ZPZ = aerobus::zpz<647>; using type =
      POLYV<ZPZV<1>, ZPZV<642>>; };  // NOLINT
04566 template<> struct ConwayPolynomial<647, 2> { using ZPZ = aerobus::zpz<647>; using type =
      POLYV<ZPZV<1>, ZPZV<645>, ZPZV<5>>; };  // NOLINT
04567 template<> struct ConwayPolynomial<647, 3> { using ZPZ = aerobus::zpz<647>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<642>>; };  // NOLINT
04568 template<> struct ConwayPolynomial<647, 4> { using ZPZ = aerobus::zpz<647>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<643>, ZPZV<5>>; };  // NOLINT
04569 template<> struct ConwayPolynomial<647, 5> { using ZPZ = aerobus::zpz<647>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<642>>; };  // NOLINT
04570 template<> struct ConwayPolynomial<647, 6> { using ZPZ = aerobus::zpz<647>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<308>, ZPZV<385>, ZPZV<642>, ZPZV<5>>; };  // NOLINT
04571 template<> struct ConwayPolynomial<647, 7> { using ZPZ = aerobus::zpz<647>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<642>>; };  // NOLINT
04572 template<> struct ConwayPolynomial<647, 8> { using ZPZ = aerobus::zpz<647>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<603>, ZPZV<259>, ZPZV<271>, ZPZV<5>>; };  //
      NOLINT
04573 template<> struct ConwayPolynomial<647, 9> { using ZPZ = aerobus::zpz<647>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<561>, ZPZV<123>, ZPZV<642>>;
      };  // NOLINT
04574 template<> struct ConwayPolynomial<653, 1> { using ZPZ = aerobus::zpz<653>; using type =
      POLYV<ZPZV<1>, ZPZV<651>>; };  // NOLINT
04575 template<> struct ConwayPolynomial<653, 2> { using ZPZ = aerobus::zpz<653>; using type =
      POLYV<ZPZV<1>, ZPZV<649>, ZPZV<2>>; };  // NOLINT
04576 template<> struct ConwayPolynomial<653, 3> { using ZPZ = aerobus::zpz<653>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<651>>; };  // NOLINT
04577 template<> struct ConwayPolynomial<653, 4> { using ZPZ = aerobus::zpz<653>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<596>, ZPZV<2>>; };  // NOLINT
04578 template<> struct ConwayPolynomial<653, 5> { using ZPZ = aerobus::zpz<653>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<651>>; };  // NOLINT
04579 template<> struct ConwayPolynomial<653, 6> { using ZPZ = aerobus::zpz<653>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<45>, ZPZV<220>, ZPZV<242>, ZPZV<2>>; };  // NOLINT
04580 template<> struct ConwayPolynomial<653, 7> { using ZPZ = aerobus::zpz<653>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<651>>; };  // NOLINT
04581 template<> struct ConwayPolynomial<653, 8> { using ZPZ = aerobus::zpz<653>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<385>, ZPZV<18>, ZPZV<296>, ZPZV<2>>; };  //
      NOLINT
04582 template<> struct ConwayPolynomial<653, 9> { using ZPZ = aerobus::zpz<653>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<365>, ZPZV<60>, ZPZV<651>>;
      };  // NOLINT
04583 template<> struct ConwayPolynomial<659, 1> { using ZPZ = aerobus::zpz<659>; using type =
      POLYV<ZPZV<1>, ZPZV<657>>; };  // NOLINT
04584 template<> struct ConwayPolynomial<659, 2> { using ZPZ = aerobus::zpz<659>; using type =
      POLYV<ZPZV<1>, ZPZV<655>, ZPZV<2>>; };  // NOLINT
04585 template<> struct ConwayPolynomial<659, 3> { using ZPZ = aerobus::zpz<659>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<657>>; };  // NOLINT
04586 template<> struct ConwayPolynomial<659, 4> { using ZPZ = aerobus::zpz<659>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<351>, ZPZV<2>>; };  // NOLINT
04587 template<> struct ConwayPolynomial<659, 5> { using ZPZ = aerobus::zpz<659>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<657>>; };  // NOLINT
04588 template<> struct ConwayPolynomial<659, 6> { using ZPZ = aerobus::zpz<659>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<371>, ZPZV<105>, ZPZV<223>, ZPZV<2>>; };  // NOLINT
04589 template<> struct ConwayPolynomial<659, 7> { using ZPZ = aerobus::zpz<659>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<657>>; };  // NOLINT
04590 template<> struct ConwayPolynomial<659, 8> { using ZPZ = aerobus::zpz<659>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<358>, ZPZV<246>, ZPZV<90>, ZPZV<2>>; };  //
      NOLINT
04591 template<> struct ConwayPolynomial<659, 9> { using ZPZ = aerobus::zpz<659>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<592>, ZPZV<46>, ZPZV<657>>;
      };  // NOLINT
04592 template<> struct ConwayPolynomial<661, 1> { using ZPZ = aerobus::zpz<661>; using type =
      POLYV<ZPZV<1>, ZPZV<659>>; };  // NOLINT
04593 template<> struct ConwayPolynomial<661, 2> { using ZPZ = aerobus::zpz<661>; using type =
      POLYV<ZPZV<1>, ZPZV<660>, ZPZV<2>>; };  // NOLINT
04594 template<> struct ConwayPolynomial<661, 3> { using ZPZ = aerobus::zpz<661>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<659>>; };  // NOLINT
04595 template<> struct ConwayPolynomial<661, 4> { using ZPZ = aerobus::zpz<661>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<616>, ZPZV<2>>; };  // NOLINT
04596 template<> struct ConwayPolynomial<661, 5> { using ZPZ = aerobus::zpz<661>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<19>, ZPZV<659>>; };  // NOLINT
04597 template<> struct ConwayPolynomial<661, 6> { using ZPZ = aerobus::zpz<661>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<551>, ZPZV<456>, ZPZV<382>, ZPZV<2>>; };  // NOLINT
04598 template<> struct ConwayPolynomial<661, 7> { using ZPZ = aerobus::zpz<661>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<659>>; };  // NOLINT
04599 template<> struct ConwayPolynomial<661, 8> { using ZPZ = aerobus::zpz<661>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<612>, ZPZV<285>, ZPZV<72>, ZPZV<2>>; };  //
      NOLINT
04600 template<> struct ConwayPolynomial<661, 9> { using ZPZ = aerobus::zpz<661>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<18>, ZPZV<389>, ZPZV<220>, ZPZV<659>>;
      };  // NOLINT
04601 template<> struct ConwayPolynomial<673, 1> { using ZPZ = aerobus::zpz<673>; using type =
      POLYV<ZPZV<1>, ZPZV<668>>; };  // NOLINT
04602 template<> struct ConwayPolynomial<673, 2> { using ZPZ = aerobus::zpz<673>; using type =
      POLYV<ZPZV<1>, ZPZV<672>, ZPZV<5>>; };  // NOLINT
04603 template<> struct ConwayPolynomial<673, 3> { using ZPZ = aerobus::zpz<673>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<668>>; };  // NOLINT
04604 template<> struct ConwayPolynomial<673, 4> { using ZPZ = aerobus::zpz<673>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<416>, ZPZV<5»; };  // NOLINT
04605 template<> struct ConwayPolynomial<673, 5> { using ZPZ = aerobus::zpz<673>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<668»; };  // NOLINT
04606 template<> struct ConwayPolynomial<673, 6> { using ZPZ = aerobus::zpz<673>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<524>, ZPZV<248>, ZPZV<35>, ZPZV<5»; };  // NOLINT
04607 template<> struct ConwayPolynomial<673, 7> { using ZPZ = aerobus::zpz<673>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<668»; };  // NOLINT
04608 template<> struct ConwayPolynomial<673, 8> { using ZPZ = aerobus::zpz<673>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<669>, ZPZV<587>, ZPZV<302>, ZPZV<5»; };  //
      NOLINT
04609 template<> struct ConwayPolynomial<673, 9> { using ZPZ = aerobus::zpz<673>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<347>, ZPZV<553>, ZPZV<668»;
      };  // NOLINT
04610 template<> struct ConwayPolynomial<677, 1> { using ZPZ = aerobus::zpz<677>; using type =
      POLYV<ZPZV<1>, ZPZV<675»; };  // NOLINT
04611 template<> struct ConwayPolynomial<677, 2> { using ZPZ = aerobus::zpz<677>; using type =
      POLYV<ZPZV<1>, ZPZV<672>, ZPZV<2»; };  // NOLINT
04612 template<> struct ConwayPolynomial<677, 3> { using ZPZ = aerobus::zpz<677>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<675»; };  // NOLINT
04613 template<> struct ConwayPolynomial<677, 4> { using ZPZ = aerobus::zpz<677>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<631>, ZPZV<2»; };  // NOLINT
04614 template<> struct ConwayPolynomial<677, 5> { using ZPZ = aerobus::zpz<677>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<675»; };  // NOLINT
04615 template<> struct ConwayPolynomial<677, 6> { using ZPZ = aerobus::zpz<677>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<446>, ZPZV<632>, ZPZV<50>, ZPZV<2»; };  // NOLINT
04616 template<> struct ConwayPolynomial<677, 7> { using ZPZ = aerobus::zpz<677>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<675»; };  // NOLINT
04617 template<> struct ConwayPolynomial<677, 8> { using ZPZ = aerobus::zpz<677>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<363>, ZPZV<619>, ZPZV<152>, ZPZV<2»; };  //
      NOLINT
04618 template<> struct ConwayPolynomial<677, 9> { using ZPZ = aerobus::zpz<677>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<504>, ZPZV<404>, ZPZV<675»;
      };  // NOLINT
04619 template<> struct ConwayPolynomial<683, 1> { using ZPZ = aerobus::zpz<683>; using type =
      POLYV<ZPZV<1>, ZPZV<678»; };  // NOLINT
04620 template<> struct ConwayPolynomial<683, 2> { using ZPZ = aerobus::zpz<683>; using type =
      POLYV<ZPZV<1>, ZPZV<682>, ZPZV<5»; };  // NOLINT
04621 template<> struct ConwayPolynomial<683, 3> { using ZPZ = aerobus::zpz<683>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<678»; };  // NOLINT
04622 template<> struct ConwayPolynomial<683, 4> { using ZPZ = aerobus::zpz<683>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<455>, ZPZV<5»; };  // NOLINT
04623 template<> struct ConwayPolynomial<683, 5> { using ZPZ = aerobus::zpz<683>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<678»; };  // NOLINT
04624 template<> struct ConwayPolynomial<683, 6> { using ZPZ = aerobus::zpz<683>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<644>, ZPZV<109>, ZPZV<434>, ZPZV<5»; };  // NOLINT
04625 template<> struct ConwayPolynomial<683, 7> { using ZPZ = aerobus::zpz<683>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<30>, ZPZV<678»; };  // NOLINT
04626 template<> struct ConwayPolynomial<683, 8> { using ZPZ = aerobus::zpz<683>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<383>, ZPZV<184>, ZPZV<65>, ZPZV<5»; };  //
      NOLINT
04627 template<> struct ConwayPolynomial<683, 9> { using ZPZ = aerobus::zpz<683>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<85>, ZPZV<444>, ZPZV<678»;
      };  // NOLINT
04628 template<> struct ConwayPolynomial<691, 1> { using ZPZ = aerobus::zpz<691>; using type =
      POLYV<ZPZV<1>, ZPZV<688»; };  // NOLINT
04629 template<> struct ConwayPolynomial<691, 2> { using ZPZ = aerobus::zpz<691>; using type =
      POLYV<ZPZV<1>, ZPZV<686>, ZPZV<3»; };  // NOLINT
04630 template<> struct ConwayPolynomial<691, 3> { using ZPZ = aerobus::zpz<691>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<14>, ZPZV<688»; };  // NOLINT
04631 template<> struct ConwayPolynomial<691, 4> { using ZPZ = aerobus::zpz<691>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<632>, ZPZV<3»; };  // NOLINT
04632 template<> struct ConwayPolynomial<691, 5> { using ZPZ = aerobus::zpz<691>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<688»; };  // NOLINT
04633 template<> struct ConwayPolynomial<691, 6> { using ZPZ = aerobus::zpz<691>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<579>, ZPZV<408>, ZPZV<262>, ZPZV<3»; };  // NOLINT
04634 template<> struct ConwayPolynomial<691, 7> { using ZPZ = aerobus::zpz<691>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<688»; };  // NOLINT
04635 template<> struct ConwayPolynomial<691, 8> { using ZPZ = aerobus::zpz<691>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<356>, ZPZV<425>, ZPZV<321>, ZPZV<3»; };  //
      NOLINT
04636 template<> struct ConwayPolynomial<691, 9> { using ZPZ = aerobus::zpz<691>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<556>, ZPZV<443>, ZPZV<688»;
      };  // NOLINT
04637 template<> struct ConwayPolynomial<701, 1> { using ZPZ = aerobus::zpz<701>; using type =
      POLYV<ZPZV<1>, ZPZV<699»; };  // NOLINT
04638 template<> struct ConwayPolynomial<701, 2> { using ZPZ = aerobus::zpz<701>; using type =
      POLYV<ZPZV<1>, ZPZV<697>, ZPZV<2»; };  // NOLINT
04639 template<> struct ConwayPolynomial<701, 3> { using ZPZ = aerobus::zpz<701>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<699»; };  // NOLINT
04640 template<> struct ConwayPolynomial<701, 4> { using ZPZ = aerobus::zpz<701>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<12>, ZPZV<379>, ZPZV<2»; };  // NOLINT
04641 template<> struct ConwayPolynomial<701, 5> { using ZPZ = aerobus::zpz<701>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<699»; };  // NOLINT
04642 template<> struct ConwayPolynomial<701, 6> { using ZPZ = aerobus::zpz<701>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<571>, ZPZV<327>, ZPZV<285>, ZPZV<2»; };  // NOLINT
04643 template<> struct ConwayPolynomial<701, 7> { using ZPZ = aerobus::zpz<701>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<699»; };  // NOLINT
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04644 template<> struct ConwayPolynomial<701, 8> { using ZPZ = aerobus::zpz<701>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<619>, ZPZV<206>, ZPZV<593>, ZPZV<2>>; };  //
      NOLINT
04645 template<> struct ConwayPolynomial<701, 9> { using ZPZ = aerobus::zpz<701>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<459>, ZPZV<373>, ZPZV<699>>;
      };  // NOLINT
04646 template<> struct ConwayPolynomial<709, 1> { using ZPZ = aerobus::zpz<709>; using type =
      POLYV<ZPZV<1>, ZPZV<707>>; };  // NOLINT
04647 template<> struct ConwayPolynomial<709, 2> { using ZPZ = aerobus::zpz<709>; using type =
      POLYV<ZPZV<1>, ZPZV<705>, ZPZV<2>>; };  // NOLINT
04648 template<> struct ConwayPolynomial<709, 3> { using ZPZ = aerobus::zpz<709>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<707>>; };  // NOLINT
04649 template<> struct ConwayPolynomial<709, 4> { using ZPZ = aerobus::zpz<709>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<384>, ZPZV<2>>; };  // NOLINT
04650 template<> struct ConwayPolynomial<709, 5> { using ZPZ = aerobus::zpz<709>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<707>>; };  // NOLINT
04651 template<> struct ConwayPolynomial<709, 6> { using ZPZ = aerobus::zpz<709>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<669>, ZPZV<514>, ZPZV<295>, ZPZV<2>>; };  // NOLINT
04652 template<> struct ConwayPolynomial<709, 7> { using ZPZ = aerobus::zpz<709>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<707>>; };  // NOLINT
04653 template<> struct ConwayPolynomial<709, 8> { using ZPZ = aerobus::zpz<709>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<689>, ZPZV<233>, ZPZV<79>, ZPZV<2>>; };  //
      NOLINT
04654 template<> struct ConwayPolynomial<709, 9> { using ZPZ = aerobus::zpz<709>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<257>, ZPZV<171>, ZPZV<707>>;
      };  // NOLINT
04655 template<> struct ConwayPolynomial<719, 1> { using ZPZ = aerobus::zpz<719>; using type =
      POLYV<ZPZV<1>, ZPZV<708>>; };  // NOLINT
04656 template<> struct ConwayPolynomial<719, 2> { using ZPZ = aerobus::zpz<719>; using type =
      POLYV<ZPZV<1>, ZPZV<715>, ZPZV<11>>; };  // NOLINT
04657 template<> struct ConwayPolynomial<719, 3> { using ZPZ = aerobus::zpz<719>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<708>>; };  // NOLINT
04658 template<> struct ConwayPolynomial<719, 4> { using ZPZ = aerobus::zpz<719>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<602>, ZPZV<11>>; };  // NOLINT
04659 template<> struct ConwayPolynomial<719, 5> { using ZPZ = aerobus::zpz<719>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<708>>; };  // NOLINT
04660 template<> struct ConwayPolynomial<719, 6> { using ZPZ = aerobus::zpz<719>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<533>, ZPZV<591>, ZPZV<182>, ZPZV<11>>; };  // NOLINT
04661 template<> struct ConwayPolynomial<719, 7> { using ZPZ = aerobus::zpz<719>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<708>>; };  // NOLINT
04662 template<> struct ConwayPolynomial<719, 8> { using ZPZ = aerobus::zpz<719>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<714>, ZPZV<362>, ZPZV<244>, ZPZV<11>>; };  //
      NOLINT
04663 template<> struct ConwayPolynomial<719, 9> { using ZPZ = aerobus::zpz<719>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<288>, ZPZV<560>, ZPZV<708>>;
      };  // NOLINT
04664 template<> struct ConwayPolynomial<727, 1> { using ZPZ = aerobus::zpz<727>; using type =
      POLYV<ZPZV<1>, ZPZV<722>>; };  // NOLINT
04665 template<> struct ConwayPolynomial<727, 2> { using ZPZ = aerobus::zpz<727>; using type =
      POLYV<ZPZV<1>, ZPZV<725>, ZPZV<5>>; };  // NOLINT
04666 template<> struct ConwayPolynomial<727, 3> { using ZPZ = aerobus::zpz<727>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<722>>; };  // NOLINT
04667 template<> struct ConwayPolynomial<727, 4> { using ZPZ = aerobus::zpz<727>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<723>, ZPZV<5>>; };  // NOLINT
04668 template<> struct ConwayPolynomial<727, 5> { using ZPZ = aerobus::zpz<727>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<722>>; };  // NOLINT
04669 template<> struct ConwayPolynomial<727, 6> { using ZPZ = aerobus::zpz<727>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<86>, ZPZV<397>, ZPZV<672>, ZPZV<5>>; };  // NOLINT
04670 template<> struct ConwayPolynomial<727, 7> { using ZPZ = aerobus::zpz<727>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<17>, ZPZV<722>>; };  // NOLINT
04671 template<> struct ConwayPolynomial<727, 8> { using ZPZ = aerobus::zpz<727>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<639>, ZPZV<671>, ZPZV<368>, ZPZV<5>>; };  //
      NOLINT
04672 template<> struct ConwayPolynomial<727, 9> { using ZPZ = aerobus::zpz<727>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<573>, ZPZV<502>, ZPZV<722>>;
      };  // NOLINT
04673 template<> struct ConwayPolynomial<733, 1> { using ZPZ = aerobus::zpz<733>; using type =
      POLYV<ZPZV<1>, ZPZV<727>>; };  // NOLINT
04674 template<> struct ConwayPolynomial<733, 2> { using ZPZ = aerobus::zpz<733>; using type =
      POLYV<ZPZV<1>, ZPZV<732>, ZPZV<6>>; };  // NOLINT
04675 template<> struct ConwayPolynomial<733, 3> { using ZPZ = aerobus::zpz<733>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<727>>; };  // NOLINT
04676 template<> struct ConwayPolynomial<733, 4> { using ZPZ = aerobus::zpz<733>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<12>, ZPZV<539>, ZPZV<6>>; };  // NOLINT
04677 template<> struct ConwayPolynomial<733, 5> { using ZPZ = aerobus::zpz<733>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<727>>; };  // NOLINT
04678 template<> struct ConwayPolynomial<733, 6> { using ZPZ = aerobus::zpz<733>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<174>, ZPZV<549>, ZPZV<151>, ZPZV<6>>; };  // NOLINT
04679 template<> struct ConwayPolynomial<733, 7> { using ZPZ = aerobus::zpz<733>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<727>>; };  // NOLINT
04680 template<> struct ConwayPolynomial<733, 8> { using ZPZ = aerobus::zpz<733>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<532>, ZPZV<610>, ZPZV<142>, ZPZV<6>>; };  //
      NOLINT
04681 template<> struct ConwayPolynomial<733, 9> { using ZPZ = aerobus::zpz<733>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<337>, ZPZV<6>, ZPZV<727>>; };
      // NOLINT
04682 template<> struct ConwayPolynomial<739, 1> { using ZPZ = aerobus::zpz<739>; using type =
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      POLYV<ZPZV<1>, ZPZV<736>>;  // NOLINT
04683 template<> struct ConwayPolynomial<739, 2> { using ZPZ = aerobus::zpz<739>; using type =
      POLYV<ZPZV<1>, ZPZV<734>, ZPZV<3>>;  // NOLINT
04684 template<> struct ConwayPolynomial<739, 3> { using ZPZ = aerobus::zpz<739>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<11>, ZPZV<736>>;  // NOLINT
04685 template<> struct ConwayPolynomial<739, 4> { using ZPZ = aerobus::zpz<739>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<678>, ZPZV<3>>;  // NOLINT
04686 template<> struct ConwayPolynomial<739, 5> { using ZPZ = aerobus::zpz<739>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<736>>;  // NOLINT
04687 template<> struct ConwayPolynomial<739, 6> { using ZPZ = aerobus::zpz<739>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<422>, ZPZV<447>, ZPZV<625>, ZPZV<3>>;  // NOLINT
04688 template<> struct ConwayPolynomial<739, 7> { using ZPZ = aerobus::zpz<739>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<44>, ZPZV<736>>;  // NOLINT
04689 template<> struct ConwayPolynomial<739, 8> { using ZPZ = aerobus::zpz<739>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<401>, ZPZV<169>, ZPZV<25>, ZPZV<3>>;  //
      NOLINT
04690 template<> struct ConwayPolynomial<739, 9> { using ZPZ = aerobus::zpz<739>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<616>, ZPZV<81>, ZPZV<736>>;
      // NOLINT
04691 template<> struct ConwayPolynomial<743, 1> { using ZPZ = aerobus::zpz<743>; using type =
      POLYV<ZPZV<1>, ZPZV<738>>;  // NOLINT
04692 template<> struct ConwayPolynomial<743, 2> { using ZPZ = aerobus::zpz<743>; using type =
      POLYV<ZPZV<1>, ZPZV<742>, ZPZV<5>>;  // NOLINT
04693 template<> struct ConwayPolynomial<743, 3> { using ZPZ = aerobus::zpz<743>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<738>>;  // NOLINT
04694 template<> struct ConwayPolynomial<743, 4> { using ZPZ = aerobus::zpz<743>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<425>, ZPZV<5>>;  // NOLINT
04695 template<> struct ConwayPolynomial<743, 5> { using ZPZ = aerobus::zpz<743>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<738>>;  // NOLINT
04696 template<> struct ConwayPolynomial<743, 6> { using ZPZ = aerobus::zpz<743>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<236>, ZPZV<471>, ZPZV<88>, ZPZV<5>>;  // NOLINT
04697 template<> struct ConwayPolynomial<743, 7> { using ZPZ = aerobus::zpz<743>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<738>>;  // NOLINT
04698 template<> struct ConwayPolynomial<743, 8> { using ZPZ = aerobus::zpz<743>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<551>, ZPZV<279>, ZPZV<588>, ZPZV<5>>;  //
      NOLINT
04699 template<> struct ConwayPolynomial<743, 9> { using ZPZ = aerobus::zpz<743>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<327>, ZPZV<676>, ZPZV<738>>;
      // NOLINT
04700 template<> struct ConwayPolynomial<751, 1> { using ZPZ = aerobus::zpz<751>; using type =
      POLYV<ZPZV<1>, ZPZV<748>>;  // NOLINT
04701 template<> struct ConwayPolynomial<751, 2> { using ZPZ = aerobus::zpz<751>; using type =
      POLYV<ZPZV<1>, ZPZV<749>, ZPZV<3>>;  // NOLINT
04702 template<> struct ConwayPolynomial<751, 3> { using ZPZ = aerobus::zpz<751>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<748>>;  // NOLINT
04703 template<> struct ConwayPolynomial<751, 4> { using ZPZ = aerobus::zpz<751>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<525>, ZPZV<3>>;  // NOLINT
04704 template<> struct ConwayPolynomial<751, 5> { using ZPZ = aerobus::zpz<751>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<748>>;  // NOLINT
04705 template<> struct ConwayPolynomial<751, 6> { using ZPZ = aerobus::zpz<751>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<298>, ZPZV<633>, ZPZV<539>, ZPZV<3>>;  // NOLINT
04706 template<> struct ConwayPolynomial<751, 7> { using ZPZ = aerobus::zpz<751>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<748>>;  // NOLINT
04707 template<> struct ConwayPolynomial<751, 8> { using ZPZ = aerobus::zpz<751>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<741>, ZPZV<243>, ZPZV<672>, ZPZV<3>>;  //
      NOLINT
04708 template<> struct ConwayPolynomial<751, 9> { using ZPZ = aerobus::zpz<751>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<703>, ZPZV<489>, ZPZV<748>>;
      // NOLINT
04709 template<> struct ConwayPolynomial<757, 1> { using ZPZ = aerobus::zpz<757>; using type =
      POLYV<ZPZV<1>, ZPZV<755>>;  // NOLINT
04710 template<> struct ConwayPolynomial<757, 2> { using ZPZ = aerobus::zpz<757>; using type =
      POLYV<ZPZV<1>, ZPZV<753>, ZPZV<2>>;  // NOLINT
04711 template<> struct ConwayPolynomial<757, 3> { using ZPZ = aerobus::zpz<757>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<755>>;  // NOLINT
04712 template<> struct ConwayPolynomial<757, 4> { using ZPZ = aerobus::zpz<757>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<10>, ZPZV<537>, ZPZV<2>>;  // NOLINT
04713 template<> struct ConwayPolynomial<757, 5> { using ZPZ = aerobus::zpz<757>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<755>>;  // NOLINT
04714 template<> struct ConwayPolynomial<757, 6> { using ZPZ = aerobus::zpz<757>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<753>, ZPZV<739>, ZPZV<745>, ZPZV<2>>;  // NOLINT
04715 template<> struct ConwayPolynomial<757, 7> { using ZPZ = aerobus::zpz<757>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<755>>;  // NOLINT
04716 template<> struct ConwayPolynomial<757, 8> { using ZPZ = aerobus::zpz<757>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<494>, ZPZV<110>, ZPZV<509>, ZPZV<2>>;  //
      NOLINT
04717 template<> struct ConwayPolynomial<757, 9> { using ZPZ = aerobus::zpz<757>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<688>, ZPZV<702>, ZPZV<755>>;
      // NOLINT
04718 template<> struct ConwayPolynomial<761, 1> { using ZPZ = aerobus::zpz<761>; using type =
      POLYV<ZPZV<1>, ZPZV<755>>;  // NOLINT
04719 template<> struct ConwayPolynomial<761, 2> { using ZPZ = aerobus::zpz<761>; using type =
      POLYV<ZPZV<1>, ZPZV<758>, ZPZV<6>>;  // NOLINT
04720 template<> struct ConwayPolynomial<761, 3> { using ZPZ = aerobus::zpz<761>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<12>, ZPZV<755>>;  // NOLINT
04721 template<> struct ConwayPolynomial<761, 4> { using ZPZ = aerobus::zpz<761>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<658>, ZPZV<6>>;  // NOLINT
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04722 template<> struct ConwayPolynomial<761, 5> { using ZPZ = aerobus::zpz<761>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<755»; };  // NOLINT
04723 template<> struct ConwayPolynomial<761, 6> { using ZPZ = aerobus::zpz<761>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<634>, ZPZV<597>, ZPZV<155>, ZPZV<6»; };  // NOLINT
04724 template<> struct ConwayPolynomial<761, 7> { using ZPZ = aerobus::zpz<761>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<755»; };  // NOLINT
04725 template<> struct ConwayPolynomial<761, 8> { using ZPZ = aerobus::zpz<761>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<603>, ZPZV<144>, ZPZV<540>, ZPZV<6»; };  //
      NOLINT
04726 template<> struct ConwayPolynomial<761, 9> { using ZPZ = aerobus::zpz<761>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<317>, ZPZV<571>, ZPZV<755»;
      };  // NOLINT
04727 template<> struct ConwayPolynomial<769, 1> { using ZPZ = aerobus::zpz<769>; using type =
      POLYV<ZPZV<1>, ZPZV<758»; };  // NOLINT
04728 template<> struct ConwayPolynomial<769, 2> { using ZPZ = aerobus::zpz<769>; using type =
      POLYV<ZPZV<1>, ZPZV<765>, ZPZV<11»; };  // NOLINT
04729 template<> struct ConwayPolynomial<769, 3> { using ZPZ = aerobus::zpz<769>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<758»; };  // NOLINT
04730 template<> struct ConwayPolynomial<769, 4> { using ZPZ = aerobus::zpz<769>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<32>, ZPZV<741>, ZPZV<11»; };  // NOLINT
04731 template<> struct ConwayPolynomial<769, 5> { using ZPZ = aerobus::zpz<769>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<758»; };  // NOLINT
04732 template<> struct ConwayPolynomial<769, 6> { using ZPZ = aerobus::zpz<769>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<43>, ZPZV<326>, ZPZV<650>, ZPZV<11»; };  // NOLINT
04733 template<> struct ConwayPolynomial<769, 7> { using ZPZ = aerobus::zpz<769>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<758»; };  // NOLINT
04734 template<> struct ConwayPolynomial<769, 8> { using ZPZ = aerobus::zpz<769>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<560>, ZPZV<574>, ZPZV<632>, ZPZV<11»; };  //
      NOLINT
04735 template<> struct ConwayPolynomial<769, 9> { using ZPZ = aerobus::zpz<769>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<623>, ZPZV<751>, ZPZV<758»;
      };  // NOLINT
04736 template<> struct ConwayPolynomial<773, 1> { using ZPZ = aerobus::zpz<773>; using type =
      POLYV<ZPZV<1>, ZPZV<771»; };  // NOLINT
04737 template<> struct ConwayPolynomial<773, 2> { using ZPZ = aerobus::zpz<773>; using type =
      POLYV<ZPZV<1>, ZPZV<772>, ZPZV<2»; };  // NOLINT
04738 template<> struct ConwayPolynomial<773, 3> { using ZPZ = aerobus::zpz<773>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<771»; };  // NOLINT
04739 template<> struct ConwayPolynomial<773, 4> { using ZPZ = aerobus::zpz<773>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<444>, ZPZV<2»; };  // NOLINT
04740 template<> struct ConwayPolynomial<773, 5> { using ZPZ = aerobus::zpz<773>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<771»; };  // NOLINT
04741 template<> struct ConwayPolynomial<773, 6> { using ZPZ = aerobus::zpz<773>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<91>, ZPZV<3>, ZPZV<581>, ZPZV<2»; };  // NOLINT
04742 template<> struct ConwayPolynomial<773, 7> { using ZPZ = aerobus::zpz<773>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<771»; };  // NOLINT
04743 template<> struct ConwayPolynomial<773, 8> { using ZPZ = aerobus::zpz<773>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<484>, ZPZV<94>, ZPZV<693>, ZPZV<2»; };  //
      NOLINT
04744 template<> struct ConwayPolynomial<773, 9> { using ZPZ = aerobus::zpz<773>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<216>, ZPZV<574>, ZPZV<771»;
      };  // NOLINT
04745 template<> struct ConwayPolynomial<787, 1> { using ZPZ = aerobus::zpz<787>; using type =
      POLYV<ZPZV<1>, ZPZV<785»; };  // NOLINT
04746 template<> struct ConwayPolynomial<787, 2> { using ZPZ = aerobus::zpz<787>; using type =
      POLYV<ZPZV<1>, ZPZV<786>, ZPZV<2»; };  // NOLINT
04747 template<> struct ConwayPolynomial<787, 3> { using ZPZ = aerobus::zpz<787>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<785»; };  // NOLINT
04748 template<> struct ConwayPolynomial<787, 4> { using ZPZ = aerobus::zpz<787>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<11>, ZPZV<605>, ZPZV<2»; };  // NOLINT
04749 template<> struct ConwayPolynomial<787, 5> { using ZPZ = aerobus::zpz<787>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<785»; };  // NOLINT
04750 template<> struct ConwayPolynomial<787, 6> { using ZPZ = aerobus::zpz<787>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<98>, ZPZV<512>, ZPZV<606>, ZPZV<2»; };  // NOLINT
04751 template<> struct ConwayPolynomial<787, 7> { using ZPZ = aerobus::zpz<787>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<785»; };  // NOLINT
04752 template<> struct ConwayPolynomial<787, 8> { using ZPZ = aerobus::zpz<787>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<612>, ZPZV<26>, ZPZV<715>, ZPZV<2»; };  //
      NOLINT
04753 template<> struct ConwayPolynomial<787, 9> { using ZPZ = aerobus::zpz<787>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<480>, ZPZV<573>, ZPZV<785»;
      };  // NOLINT
04754 template<> struct ConwayPolynomial<797, 1> { using ZPZ = aerobus::zpz<797>; using type =
      POLYV<ZPZV<1>, ZPZV<795»; };  // NOLINT
04755 template<> struct ConwayPolynomial<797, 2> { using ZPZ = aerobus::zpz<797>; using type =
      POLYV<ZPZV<1>, ZPZV<793>, ZPZV<2»; };  // NOLINT
04756 template<> struct ConwayPolynomial<797, 3> { using ZPZ = aerobus::zpz<797>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<795»; };  // NOLINT
04757 template<> struct ConwayPolynomial<797, 4> { using ZPZ = aerobus::zpz<797>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<717>, ZPZV<2»; };  // NOLINT
04758 template<> struct ConwayPolynomial<797, 5> { using ZPZ = aerobus::zpz<797>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<795»; };  // NOLINT
04759 template<> struct ConwayPolynomial<797, 6> { using ZPZ = aerobus::zpz<797>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<657>, ZPZV<396>, ZPZV<71>, ZPZV<2»; };  // NOLINT
04760 template<> struct ConwayPolynomial<797, 7> { using ZPZ = aerobus::zpz<797>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<795»; };  // NOLINT
04761 template<> struct ConwayPolynomial<797, 8> { using ZPZ = aerobus::zpz<797>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<596>, ZPZV<747>, ZPZV<389>, ZPZV<2>>; };  //
      NOLINT
04762 template<> struct ConwayPolynomial<797, 9> { using ZPZ = aerobus::zpz<797>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<240>, ZPZV<599>, ZPZV<795>>;
      };  // NOLINT
04763 template<> struct ConwayPolynomial<809, 1> { using ZPZ = aerobus::zpz<809>; using type =
      POLYV<ZPZV<1>, ZPZV<806>>; };  // NOLINT
04764 template<> struct ConwayPolynomial<809, 2> { using ZPZ = aerobus::zpz<809>; using type =
      POLYV<ZPZV<1>, ZPZV<799>, ZPZV<3>>; };  // NOLINT
04765 template<> struct ConwayPolynomial<809, 3> { using ZPZ = aerobus::zpz<809>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<806>>; };  // NOLINT
04766 template<> struct ConwayPolynomial<809, 4> { using ZPZ = aerobus::zpz<809>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<644>, ZPZV<3>>; };  // NOLINT
04767 template<> struct ConwayPolynomial<809, 5> { using ZPZ = aerobus::zpz<809>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<806>>; };  // NOLINT
04768 template<> struct ConwayPolynomial<809, 6> { using ZPZ = aerobus::zpz<809>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<562>, ZPZV<75>, ZPZV<43>, ZPZV<3>>; };  // NOLINT
04769 template<> struct ConwayPolynomial<809, 7> { using ZPZ = aerobus::zpz<809>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<806>>; };  // NOLINT
04770 template<> struct ConwayPolynomial<809, 8> { using ZPZ = aerobus::zpz<809>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<593>, ZPZV<745>, ZPZV<673>, ZPZV<3>>; };  //
      NOLINT
04771 template<> struct ConwayPolynomial<809, 9> { using ZPZ = aerobus::zpz<809>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<341>, ZPZV<727>, ZPZV<806>>;
      };  // NOLINT
04772 template<> struct ConwayPolynomial<811, 1> { using ZPZ = aerobus::zpz<811>; using type =
      POLYV<ZPZV<1>, ZPZV<808>>; };  // NOLINT
04773 template<> struct ConwayPolynomial<811, 2> { using ZPZ = aerobus::zpz<811>; using type =
      POLYV<ZPZV<1>, ZPZV<806>, ZPZV<3>>; };  // NOLINT
04774 template<> struct ConwayPolynomial<811, 3> { using ZPZ = aerobus::zpz<811>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<808>>; };  // NOLINT
04775 template<> struct ConwayPolynomial<811, 4> { using ZPZ = aerobus::zpz<811>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<453>, ZPZV<3>>; };  // NOLINT
04776 template<> struct ConwayPolynomial<811, 5> { using ZPZ = aerobus::zpz<811>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<808>>; };  // NOLINT
04777 template<> struct ConwayPolynomial<811, 6> { using ZPZ = aerobus::zpz<811>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<780>, ZPZV<755>, ZPZV<307>, ZPZV<3>>; };  // NOLINT
04778 template<> struct ConwayPolynomial<811, 7> { using ZPZ = aerobus::zpz<811>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<808>>; };  // NOLINT
04779 template<> struct ConwayPolynomial<811, 8> { using ZPZ = aerobus::zpz<811>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<663>, ZPZV<806>, ZPZV<525>, ZPZV<3>>; };  //
      NOLINT
04780 template<> struct ConwayPolynomial<811, 9> { using ZPZ = aerobus::zpz<811>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<382>, ZPZV<200>, ZPZV<808>>;
      };  // NOLINT
04781 template<> struct ConwayPolynomial<821, 1> { using ZPZ = aerobus::zpz<821>; using type =
      POLYV<ZPZV<1>, ZPZV<819>>; };  // NOLINT
04782 template<> struct ConwayPolynomial<821, 2> { using ZPZ = aerobus::zpz<821>; using type =
      POLYV<ZPZV<1>, ZPZV<816>, ZPZV<2>>; };  // NOLINT
04783 template<> struct ConwayPolynomial<821, 3> { using ZPZ = aerobus::zpz<821>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<819>>; };  // NOLINT
04784 template<> struct ConwayPolynomial<821, 4> { using ZPZ = aerobus::zpz<821>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<15>, ZPZV<662>, ZPZV<2>>; };  // NOLINT
04785 template<> struct ConwayPolynomial<821, 5> { using ZPZ = aerobus::zpz<821>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<819>>; };  // NOLINT
04786 template<> struct ConwayPolynomial<821, 6> { using ZPZ = aerobus::zpz<821>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<160>, ZPZV<130>, ZPZV<803>, ZPZV<2>>; };  // NOLINT
04787 template<> struct ConwayPolynomial<821, 7> { using ZPZ = aerobus::zpz<821>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<819>>; };  // NOLINT
04788 template<> struct ConwayPolynomial<821, 8> { using ZPZ = aerobus::zpz<821>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<626>, ZPZV<556>, ZPZV<589>, ZPZV<2>>; };  //
      NOLINT
04789 template<> struct ConwayPolynomial<821, 9> { using ZPZ = aerobus::zpz<821>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<650>, ZPZV<557>, ZPZV<819>>;
      };  // NOLINT
04790 template<> struct ConwayPolynomial<823, 1> { using ZPZ = aerobus::zpz<823>; using type =
      POLYV<ZPZV<1>, ZPZV<820>>; };  // NOLINT
04791 template<> struct ConwayPolynomial<823, 2> { using ZPZ = aerobus::zpz<823>; using type =
      POLYV<ZPZV<1>, ZPZV<821>, ZPZV<3>>; };  // NOLINT
04792 template<> struct ConwayPolynomial<823, 3> { using ZPZ = aerobus::zpz<823>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<820>>; };  // NOLINT
04793 template<> struct ConwayPolynomial<823, 4> { using ZPZ = aerobus::zpz<823>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<819>, ZPZV<3>>; };  // NOLINT
04794 template<> struct ConwayPolynomial<823, 5> { using ZPZ = aerobus::zpz<823>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<820>>; };  // NOLINT
04795 template<> struct ConwayPolynomial<823, 6> { using ZPZ = aerobus::zpz<823>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<822>, ZPZV<616>, ZPZV<744>, ZPZV<3>>; };  // NOLINT
04796 template<> struct ConwayPolynomial<823, 7> { using ZPZ = aerobus::zpz<823>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<820>>; };  // NOLINT
04797 template<> struct ConwayPolynomial<823, 8> { using ZPZ = aerobus::zpz<823>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<451>, ZPZV<437>, ZPZV<31>, ZPZV<3>>; };  //
      NOLINT
04798 template<> struct ConwayPolynomial<823, 9> { using ZPZ = aerobus::zpz<823>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<740>, ZPZV<609>, ZPZV<820>>;
      };  // NOLINT
04799 template<> struct ConwayPolynomial<827, 1> { using ZPZ = aerobus::zpz<827>; using type =
      POLYV<ZPZV<1>, ZPZV<825>>; };  // NOLINT
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04800 template<> struct ConwayPolynomial<827, 2> { using ZPZ = aerobus::zpz<827>; using type =
      POLYV<ZPZV<1>, ZPZV<821>, ZPZV<2>>; };  // NOLINT
04801 template<> struct ConwayPolynomial<827, 3> { using ZPZ = aerobus::zpz<827>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<825>>; };  // NOLINT
04802 template<> struct ConwayPolynomial<827, 4> { using ZPZ = aerobus::zpz<827>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<18>, ZPZV<605>, ZPZV<2>>; };  // NOLINT
04803 template<> struct ConwayPolynomial<827, 5> { using ZPZ = aerobus::zpz<827>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<825>>; };  // NOLINT
04804 template<> struct ConwayPolynomial<827, 6> { using ZPZ = aerobus::zpz<827>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<9>, ZPZV<685>, ZPZV<601>, ZPZV<691>, ZPZV<2>>; };  // NOLINT
04805 template<> struct ConwayPolynomial<827, 7> { using ZPZ = aerobus::zpz<827>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<825>>; };  // NOLINT
04806 template<> struct ConwayPolynomial<827, 8> { using ZPZ = aerobus::zpz<827>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<812>, ZPZV<79>, ZPZV<32>, ZPZV<2>>; };  //
      NOLINT
04807 template<> struct ConwayPolynomial<827, 9> { using ZPZ = aerobus::zpz<827>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<177>, ZPZV<372>, ZPZV<825>>;
      };  // NOLINT
04808 template<> struct ConwayPolynomial<829, 1> { using ZPZ = aerobus::zpz<829>; using type =
      POLYV<ZPZV<1>, ZPZV<827>>; };  // NOLINT
04809 template<> struct ConwayPolynomial<829, 2> { using ZPZ = aerobus::zpz<829>; using type =
      POLYV<ZPZV<1>, ZPZV<828>, ZPZV<2>>; };  // NOLINT
04810 template<> struct ConwayPolynomial<829, 3> { using ZPZ = aerobus::zpz<829>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<827>>; };  // NOLINT
04811 template<> struct ConwayPolynomial<829, 4> { using ZPZ = aerobus::zpz<829>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<9>, ZPZV<604>, ZPZV<2>>; };  // NOLINT
04812 template<> struct ConwayPolynomial<829, 5> { using ZPZ = aerobus::zpz<829>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<827>>; };  // NOLINT
04813 template<> struct ConwayPolynomial<829, 6> { using ZPZ = aerobus::zpz<829>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<341>, ZPZV<476>, ZPZV<817>, ZPZV<2>>; };  // NOLINT
04814 template<> struct ConwayPolynomial<829, 7> { using ZPZ = aerobus::zpz<829>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<827>>; };  // NOLINT
04815 template<> struct ConwayPolynomial<829, 8> { using ZPZ = aerobus::zpz<829>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<468>, ZPZV<241>, ZPZV<138>, ZPZV<2>>; };  //
      NOLINT
04816 template<> struct ConwayPolynomial<829, 9> { using ZPZ = aerobus::zpz<829>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<621>, ZPZV<552>, ZPZV<827>>;
      };  // NOLINT
04817 template<> struct ConwayPolynomial<839, 1> { using ZPZ = aerobus::zpz<839>; using type =
      POLYV<ZPZV<1>, ZPZV<828>>; };  // NOLINT
04818 template<> struct ConwayPolynomial<839, 2> { using ZPZ = aerobus::zpz<839>; using type =
      POLYV<ZPZV<1>, ZPZV<838>, ZPZV<11>>; };  // NOLINT
04819 template<> struct ConwayPolynomial<839, 3> { using ZPZ = aerobus::zpz<839>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<828>>; };  // NOLINT
04820 template<> struct ConwayPolynomial<839, 4> { using ZPZ = aerobus::zpz<839>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<609>, ZPZV<11>>; };  // NOLINT
04821 template<> struct ConwayPolynomial<839, 5> { using ZPZ = aerobus::zpz<839>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<828>>; };  // NOLINT
04822 template<> struct ConwayPolynomial<839, 6> { using ZPZ = aerobus::zpz<839>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<370>, ZPZV<537>, ZPZV<23>, ZPZV<11>>; };  // NOLINT
04823 template<> struct ConwayPolynomial<839, 7> { using ZPZ = aerobus::zpz<839>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<828>>; };  // NOLINT
04824 template<> struct ConwayPolynomial<839, 8> { using ZPZ = aerobus::zpz<839>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<16>, ZPZV<553>, ZPZV<779>, ZPZV<329>, ZPZV<11>>; };  //
      NOLINT
04825 template<> struct ConwayPolynomial<839, 9> { using ZPZ = aerobus::zpz<839>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<349>, ZPZV<206>, ZPZV<828>>;
      };  // NOLINT
04826 template<> struct ConwayPolynomial<853, 1> { using ZPZ = aerobus::zpz<853>; using type =
      POLYV<ZPZV<1>, ZPZV<851>>; };  // NOLINT
04827 template<> struct ConwayPolynomial<853, 2> { using ZPZ = aerobus::zpz<853>; using type =
      POLYV<ZPZV<1>, ZPZV<852>, ZPZV<2>>; };  // NOLINT
04828 template<> struct ConwayPolynomial<853, 3> { using ZPZ = aerobus::zpz<853>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<851>>; };  // NOLINT
04829 template<> struct ConwayPolynomial<853, 4> { using ZPZ = aerobus::zpz<853>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<623>, ZPZV<2>>; };  // NOLINT
04830 template<> struct ConwayPolynomial<853, 5> { using ZPZ = aerobus::zpz<853>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<851>>; };  // NOLINT
04831 template<> struct ConwayPolynomial<853, 6> { using ZPZ = aerobus::zpz<853>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<276>, ZPZV<194>, ZPZV<512>, ZPZV<2>>; };  // NOLINT
04832 template<> struct ConwayPolynomial<853, 7> { using ZPZ = aerobus::zpz<853>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<851>>; };  // NOLINT
04833 template<> struct ConwayPolynomial<853, 8> { using ZPZ = aerobus::zpz<853>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<544>, ZPZV<846>, ZPZV<118>, ZPZV<2>>; };  //
      NOLINT
04834 template<> struct ConwayPolynomial<853, 9> { using ZPZ = aerobus::zpz<853>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<677>, ZPZV<821>, ZPZV<851>>;
      };  // NOLINT
04835 template<> struct ConwayPolynomial<857, 1> { using ZPZ = aerobus::zpz<857>; using type =
      POLYV<ZPZV<1>, ZPZV<854>>; };  // NOLINT
04836 template<> struct ConwayPolynomial<857, 2> { using ZPZ = aerobus::zpz<857>; using type =
      POLYV<ZPZV<1>, ZPZV<850>, ZPZV<3>>; };  // NOLINT
04837 template<> struct ConwayPolynomial<857, 3> { using ZPZ = aerobus::zpz<857>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<854>>; };  // NOLINT
04838 template<> struct ConwayPolynomial<857, 4> { using ZPZ = aerobus::zpz<857>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<528>, ZPZV<3>>; };  // NOLINT
04839 template<> struct ConwayPolynomial<857, 5> { using ZPZ = aerobus::zpz<857>; using type =
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      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<854»; };  // NOLINT
04840 template<> struct ConwayPolynomial<857, 6> { using ZPZ = aerobus::zpz<857>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<32>, ZPZV<824>, ZPZV<65>, ZPZV<3»; };  // NOLINT
04841 template<> struct ConwayPolynomial<857, 7> { using ZPZ = aerobus::zpz<857>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<854»; };  // NOLINT
04842 template<> struct ConwayPolynomial<857, 8> { using ZPZ = aerobus::zpz<857>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<611>, ZPZV<552>, ZPZV<494>, ZPZV<3»; };  //
      NOLINT
04843 template<> struct ConwayPolynomial<857, 9> { using ZPZ = aerobus::zpz<857>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<308>, ZPZV<719>, ZPZV<854»;
      };  // NOLINT
04844 template<> struct ConwayPolynomial<859, 1> { using ZPZ = aerobus::zpz<859>; using type =
      POLYV<ZPZV<1>, ZPZV<857»; };  // NOLINT
04845 template<> struct ConwayPolynomial<859, 2> { using ZPZ = aerobus::zpz<859>; using type =
      POLYV<ZPZV<1>, ZPZV<858>, ZPZV<2»; };  // NOLINT
04846 template<> struct ConwayPolynomial<859, 3> { using ZPZ = aerobus::zpz<859>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<857»; };  // NOLINT
04847 template<> struct ConwayPolynomial<859, 4> { using ZPZ = aerobus::zpz<859>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<530>, ZPZV<2»; };  // NOLINT
04848 template<> struct ConwayPolynomial<859, 5> { using ZPZ = aerobus::zpz<859>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<12>, ZPZV<857»; };  // NOLINT
04849 template<> struct ConwayPolynomial<859, 6> { using ZPZ = aerobus::zpz<859>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<419>, ZPZV<646>, ZPZV<566>, ZPZV<2»; };  // NOLINT
04850 template<> struct ConwayPolynomial<859, 7> { using ZPZ = aerobus::zpz<859>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<857»; };  // NOLINT
04851 template<> struct ConwayPolynomial<859, 8> { using ZPZ = aerobus::zpz<859>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<522>, ZPZV<446>, ZPZV<672>, ZPZV<2»; };  //
      NOLINT
04852 template<> struct ConwayPolynomial<859, 9> { using ZPZ = aerobus::zpz<859>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<648>, ZPZV<845>, ZPZV<857»;
      };  // NOLINT
04853 template<> struct ConwayPolynomial<863, 1> { using ZPZ = aerobus::zpz<863>; using type =
      POLYV<ZPZV<1>, ZPZV<858»; };  // NOLINT
04854 template<> struct ConwayPolynomial<863, 2> { using ZPZ = aerobus::zpz<863>; using type =
      POLYV<ZPZV<1>, ZPZV<862>, ZPZV<5»; };  // NOLINT
04855 template<> struct ConwayPolynomial<863, 3> { using ZPZ = aerobus::zpz<863>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<858»; };  // NOLINT
04856 template<> struct ConwayPolynomial<863, 4> { using ZPZ = aerobus::zpz<863>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<770>, ZPZV<5»; };  // NOLINT
04857 template<> struct ConwayPolynomial<863, 5> { using ZPZ = aerobus::zpz<863>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<858»; };  // NOLINT
04858 template<> struct ConwayPolynomial<863, 6> { using ZPZ = aerobus::zpz<863>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<330>, ZPZV<62>, ZPZV<300>, ZPZV<5»; };  // NOLINT
04859 template<> struct ConwayPolynomial<863, 7> { using ZPZ = aerobus::zpz<863>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<858»; };  // NOLINT
04860 template<> struct ConwayPolynomial<863, 8> { using ZPZ = aerobus::zpz<863>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<765>, ZPZV<576>, ZPZV<849>, ZPZV<5»; };  //
      NOLINT
04861 template<> struct ConwayPolynomial<863, 9> { using ZPZ = aerobus::zpz<863>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<381>, ZPZV<1>, ZPZV<858»; };
      // NOLINT
04862 template<> struct ConwayPolynomial<877, 1> { using ZPZ = aerobus::zpz<877>; using type =
      POLYV<ZPZV<1>, ZPZV<875»; };  // NOLINT
04863 template<> struct ConwayPolynomial<877, 2> { using ZPZ = aerobus::zpz<877>; using type =
      POLYV<ZPZV<1>, ZPZV<873>, ZPZV<2»; };  // NOLINT
04864 template<> struct ConwayPolynomial<877, 3> { using ZPZ = aerobus::zpz<877>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<875»; };  // NOLINT
04865 template<> struct ConwayPolynomial<877, 4> { using ZPZ = aerobus::zpz<877>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<604>, ZPZV<2»; };  // NOLINT
04866 template<> struct ConwayPolynomial<877, 5> { using ZPZ = aerobus::zpz<877>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<875»; };  // NOLINT
04867 template<> struct ConwayPolynomial<877, 6> { using ZPZ = aerobus::zpz<877>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<629>, ZPZV<400>, ZPZV<855>, ZPZV<2»; };  // NOLINT
04868 template<> struct ConwayPolynomial<877, 7> { using ZPZ = aerobus::zpz<877>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<875»; };  // NOLINT
04869 template<> struct ConwayPolynomial<877, 8> { using ZPZ = aerobus::zpz<877>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<767>, ZPZV<319>, ZPZV<347>, ZPZV<2»; };  //
      NOLINT
04870 template<> struct ConwayPolynomial<877, 9> { using ZPZ = aerobus::zpz<877>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<770>, ZPZV<278>, ZPZV<875»;
      };  // NOLINT
04871 template<> struct ConwayPolynomial<881, 1> { using ZPZ = aerobus::zpz<881>; using type =
      POLYV<ZPZV<1>, ZPZV<878»; };  // NOLINT
04872 template<> struct ConwayPolynomial<881, 2> { using ZPZ = aerobus::zpz<881>; using type =
      POLYV<ZPZV<1>, ZPZV<869>, ZPZV<3»; };  // NOLINT
04873 template<> struct ConwayPolynomial<881, 3> { using ZPZ = aerobus::zpz<881>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<878»; };  // NOLINT
04874 template<> struct ConwayPolynomial<881, 4> { using ZPZ = aerobus::zpz<881>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<447>, ZPZV<3»; };  // NOLINT
04875 template<> struct ConwayPolynomial<881, 5> { using ZPZ = aerobus::zpz<881>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<878»; };  // NOLINT
04876 template<> struct ConwayPolynomial<881, 6> { using ZPZ = aerobus::zpz<881>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<218>, ZPZV<419>, ZPZV<231>, ZPZV<3»; };  // NOLINT
04877 template<> struct ConwayPolynomial<881, 7> { using ZPZ = aerobus::zpz<881>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<878»; };  // NOLINT
04878 template<> struct ConwayPolynomial<881, 8> { using ZPZ = aerobus::zpz<881>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<21>, ZPZV<635>, ZPZV<490>, ZPZV<561>, ZPZV<3»; };  //
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      NOLINT
04879 template<> struct ConwayPolynomial<881, 9> { using ZPZ = aerobus::zpz<881>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<587>, ZPZV<510>, ZPZV<878»;
      };  // NOLINT
04880 template<> struct ConwayPolynomial<883, 1> { using ZPZ = aerobus::zpz<883>; using type =
      POLYV<ZPZV<1>, ZPZV<881»; };  // NOLINT
04881 template<> struct ConwayPolynomial<883, 2> { using ZPZ = aerobus::zpz<883>; using type =
      POLYV<ZPZV<1>, ZPZV<879>, ZPZV<2»; };  // NOLINT
04882 template<> struct ConwayPolynomial<883, 3> { using ZPZ = aerobus::zpz<883>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<6>, ZPZV<881»; };  // NOLINT
04883 template<> struct ConwayPolynomial<883, 4> { using ZPZ = aerobus::zpz<883>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<715>, ZPZV<2»; };  // NOLINT
04884 template<> struct ConwayPolynomial<883, 5> { using ZPZ = aerobus::zpz<883>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<881»; };  // NOLINT
04885 template<> struct ConwayPolynomial<883, 6> { using ZPZ = aerobus::zpz<883>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<879>, ZPZV<865>, ZPZV<871>, ZPZV<2»; };  // NOLINT
04886 template<> struct ConwayPolynomial<883, 7> { using ZPZ = aerobus::zpz<883>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<881»; };  // NOLINT
04887 template<> struct ConwayPolynomial<883, 8> { using ZPZ = aerobus::zpz<883>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<740>, ZPZV<762>, ZPZV<768>, ZPZV<2»; };  //
      NOLINT
04888 template<> struct ConwayPolynomial<883, 9> { using ZPZ = aerobus::zpz<883>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<360>, ZPZV<557>, ZPZV<881»;
      };  // NOLINT
04889 template<> struct ConwayPolynomial<887, 1> { using ZPZ = aerobus::zpz<887>; using type =
      POLYV<ZPZV<1>, ZPZV<882»; };  // NOLINT
04890 template<> struct ConwayPolynomial<887, 2> { using ZPZ = aerobus::zpz<887>; using type =
      POLYV<ZPZV<1>, ZPZV<885>, ZPZV<5»; };  // NOLINT
04891 template<> struct ConwayPolynomial<887, 3> { using ZPZ = aerobus::zpz<887>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<882»; };  // NOLINT
04892 template<> struct ConwayPolynomial<887, 4> { using ZPZ = aerobus::zpz<887>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<883>, ZPZV<5»; };  // NOLINT
04893 template<> struct ConwayPolynomial<887, 5> { using ZPZ = aerobus::zpz<887>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<882»; };  // NOLINT
04894 template<> struct ConwayPolynomial<887, 6> { using ZPZ = aerobus::zpz<887>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<775>, ZPZV<341>, ZPZV<28>, ZPZV<5»; };  // NOLINT
04895 template<> struct ConwayPolynomial<887, 7> { using ZPZ = aerobus::zpz<887>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<882»; };  // NOLINT
04896 template<> struct ConwayPolynomial<887, 8> { using ZPZ = aerobus::zpz<887>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<781>, ZPZV<381>, ZPZV<706>, ZPZV<5»; };  //
      NOLINT
04897 template<> struct ConwayPolynomial<887, 9> { using ZPZ = aerobus::zpz<887>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<727>, ZPZV<345>, ZPZV<882»;
      };  // NOLINT
04898 template<> struct ConwayPolynomial<907, 1> { using ZPZ = aerobus::zpz<907>; using type =
      POLYV<ZPZV<1>, ZPZV<905»; };  // NOLINT
04899 template<> struct ConwayPolynomial<907, 2> { using ZPZ = aerobus::zpz<907>; using type =
      POLYV<ZPZV<1>, ZPZV<903>, ZPZV<2»; };  // NOLINT
04900 template<> struct ConwayPolynomial<907, 3> { using ZPZ = aerobus::zpz<907>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<905»; };  // NOLINT
04901 template<> struct ConwayPolynomial<907, 4> { using ZPZ = aerobus::zpz<907>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<14>, ZPZV<478>, ZPZV<2»; };  // NOLINT
04902 template<> struct ConwayPolynomial<907, 5> { using ZPZ = aerobus::zpz<907>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<905»; };  // NOLINT
04903 template<> struct ConwayPolynomial<907, 6> { using ZPZ = aerobus::zpz<907>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<626>, ZPZV<752>, ZPZV<266>, ZPZV<2»; };  // NOLINT
04904 template<> struct ConwayPolynomial<907, 7> { using ZPZ = aerobus::zpz<907>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<905»; };  // NOLINT
04905 template<> struct ConwayPolynomial<907, 8> { using ZPZ = aerobus::zpz<907>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<584>, ZPZV<518>, ZPZV<811>, ZPZV<2»; };  //
      NOLINT
04906 template<> struct ConwayPolynomial<907, 9> { using ZPZ = aerobus::zpz<907>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<783>, ZPZV<57>, ZPZV<905»;
      };  // NOLINT
04907 template<> struct ConwayPolynomial<911, 1> { using ZPZ = aerobus::zpz<911>; using type =
      POLYV<ZPZV<1>, ZPZV<894»; };  // NOLINT
04908 template<> struct ConwayPolynomial<911, 2> { using ZPZ = aerobus::zpz<911>; using type =
      POLYV<ZPZV<1>, ZPZV<909>, ZPZV<17»; };  // NOLINT
04909 template<> struct ConwayPolynomial<911, 3> { using ZPZ = aerobus::zpz<911>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<894»; };  // NOLINT
04910 template<> struct ConwayPolynomial<911, 4> { using ZPZ = aerobus::zpz<911>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<11>, ZPZV<887>, ZPZV<17»; };  // NOLINT
04911 template<> struct ConwayPolynomial<911, 5> { using ZPZ = aerobus::zpz<911>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<894»; };  // NOLINT
04912 template<> struct ConwayPolynomial<911, 6> { using ZPZ = aerobus::zpz<911>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<172>, ZPZV<683>, ZPZV<19>, ZPZV<17»; };  // NOLINT
04913 template<> struct ConwayPolynomial<911, 7> { using ZPZ = aerobus::zpz<911>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<894»; };  // NOLINT
04914 template<> struct ConwayPolynomial<911, 8> { using ZPZ = aerobus::zpz<911>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<708>, ZPZV<590>, ZPZV<168>, ZPZV<17»; };  //
      NOLINT
04915 template<> struct ConwayPolynomial<911, 9> { using ZPZ = aerobus::zpz<911>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<679>, ZPZV<116>, ZPZV<894»;
      };  // NOLINT
04916 template<> struct ConwayPolynomial<919, 1> { using ZPZ = aerobus::zpz<919>; using type =
      POLYV<ZPZV<1>, ZPZV<912»; };  // NOLINT
04917 template<> struct ConwayPolynomial<919, 2> { using ZPZ = aerobus::zpz<919>; using type =
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      POLYV<ZPZV<1>, ZPZV<910>, ZPZV<7»; };  // NOLINT
04918 template<> struct ConwayPolynomial<919, 3> { using ZPZ = aerobus::zpz<919>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<912»; };  // NOLINT
04919 template<> struct ConwayPolynomial<919, 4> { using ZPZ = aerobus::zpz<919>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<602>, ZPZV<7»; };  // NOLINT
04920 template<> struct ConwayPolynomial<919, 5> { using ZPZ = aerobus::zpz<919>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<912»; };  // NOLINT
04921 template<> struct ConwayPolynomial<919, 6> { using ZPZ = aerobus::zpz<919>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<312>, ZPZV<817>, ZPZV<113>, ZPZV<7»; };  // NOLINT
04922 template<> struct ConwayPolynomial<919, 7> { using ZPZ = aerobus::zpz<919>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<912»; };  // NOLINT
04923 template<> struct ConwayPolynomial<919, 8> { using ZPZ = aerobus::zpz<919>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<708>, ZPZV<202>, ZPZV<504>, ZPZV<7»; };  //
      NOLINT
04924 template<> struct ConwayPolynomial<919, 9> { using ZPZ = aerobus::zpz<919>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<410>, ZPZV<623>, ZPZV<912»;
      };  // NOLINT
04925 template<> struct ConwayPolynomial<929, 1> { using ZPZ = aerobus::zpz<929>; using type =
      POLYV<ZPZV<1>, ZPZV<926»; };  // NOLINT
04926 template<> struct ConwayPolynomial<929, 2> { using ZPZ = aerobus::zpz<929>; using type =
      POLYV<ZPZV<1>, ZPZV<917>, ZPZV<3»; };  // NOLINT
04927 template<> struct ConwayPolynomial<929, 3> { using ZPZ = aerobus::zpz<929>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<926»; };  // NOLINT
04928 template<> struct ConwayPolynomial<929, 4> { using ZPZ = aerobus::zpz<929>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<787>, ZPZV<3»; };  // NOLINT
04929 template<> struct ConwayPolynomial<929, 5> { using ZPZ = aerobus::zpz<929>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<926»; };  // NOLINT
04930 template<> struct ConwayPolynomial<929, 6> { using ZPZ = aerobus::zpz<929>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<805>, ZPZV<92>, ZPZV<86>, ZPZV<3»; };  // NOLINT
04931 template<> struct ConwayPolynomial<929, 7> { using ZPZ = aerobus::zpz<929>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<926»; };  // NOLINT
04932 template<> struct ConwayPolynomial<929, 8> { using ZPZ = aerobus::zpz<929>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<699>, ZPZV<292>, ZPZV<586>, ZPZV<3»; };  //
      NOLINT
04933 template<> struct ConwayPolynomial<929, 9> { using ZPZ = aerobus::zpz<929>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<481>, ZPZV<199>, ZPZV<926»;
      };  // NOLINT
04934 template<> struct ConwayPolynomial<937, 1> { using ZPZ = aerobus::zpz<937>; using type =
      POLYV<ZPZV<1>, ZPZV<932»; };  // NOLINT
04935 template<> struct ConwayPolynomial<937, 2> { using ZPZ = aerobus::zpz<937>; using type =
      POLYV<ZPZV<1>, ZPZV<934>, ZPZV<5»; };  // NOLINT
04936 template<> struct ConwayPolynomial<937, 3> { using ZPZ = aerobus::zpz<937>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<932»; };  // NOLINT
04937 template<> struct ConwayPolynomial<937, 4> { using ZPZ = aerobus::zpz<937>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<23>, ZPZV<585>, ZPZV<5»; };  // NOLINT
04938 template<> struct ConwayPolynomial<937, 5> { using ZPZ = aerobus::zpz<937>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<932»; };  // NOLINT
04939 template<> struct ConwayPolynomial<937, 6> { using ZPZ = aerobus::zpz<937>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<794>, ZPZV<727>, ZPZV<934>, ZPZV<5»; };  // NOLINT
04940 template<> struct ConwayPolynomial<937, 7> { using ZPZ = aerobus::zpz<937>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<24>, ZPZV<932»; };  // NOLINT
04941 template<> struct ConwayPolynomial<937, 8> { using ZPZ = aerobus::zpz<937>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<658>, ZPZV<26>, ZPZV<53>, ZPZV<5»; };  //
      NOLINT
04942 template<> struct ConwayPolynomial<937, 9> { using ZPZ = aerobus::zpz<937>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<28>, ZPZV<533>, ZPZV<483>, ZPZV<932»;
      };  // NOLINT
04943 template<> struct ConwayPolynomial<941, 1> { using ZPZ = aerobus::zpz<941>; using type =
      POLYV<ZPZV<1>, ZPZV<939»; };  // NOLINT
04944 template<> struct ConwayPolynomial<941, 2> { using ZPZ = aerobus::zpz<941>; using type =
      POLYV<ZPZV<1>, ZPZV<940>, ZPZV<2»; };  // NOLINT
04945 template<> struct ConwayPolynomial<941, 3> { using ZPZ = aerobus::zpz<941>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<939»; };  // NOLINT
04946 template<> struct ConwayPolynomial<941, 4> { using ZPZ = aerobus::zpz<941>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<505>, ZPZV<2»; };  // NOLINT
04947 template<> struct ConwayPolynomial<941, 5> { using ZPZ = aerobus::zpz<941>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<939»; };  // NOLINT
04948 template<> struct ConwayPolynomial<941, 6> { using ZPZ = aerobus::zpz<941>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<459>, ZPZV<694>, ZPZV<538>, ZPZV<2»; };  // NOLINT
04949 template<> struct ConwayPolynomial<941, 7> { using ZPZ = aerobus::zpz<941>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<4>, ZPZV<939»; };  // NOLINT
04950 template<> struct ConwayPolynomial<941, 8> { using ZPZ = aerobus::zpz<941>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<805>, ZPZV<675>, ZPZV<590>, ZPZV<2»; };  //
      NOLINT
04951 template<> struct ConwayPolynomial<941, 9> { using ZPZ = aerobus::zpz<941>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<708>, ZPZV<197>, ZPZV<939»;
      };  // NOLINT
04952 template<> struct ConwayPolynomial<947, 1> { using ZPZ = aerobus::zpz<947>; using type =
      POLYV<ZPZV<1>, ZPZV<945»; };  // NOLINT
04953 template<> struct ConwayPolynomial<947, 2> { using ZPZ = aerobus::zpz<947>; using type =
      POLYV<ZPZV<1>, ZPZV<943>, ZPZV<2»; };  // NOLINT
04954 template<> struct ConwayPolynomial<947, 3> { using ZPZ = aerobus::zpz<947>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<945»; };  // NOLINT
04955 template<> struct ConwayPolynomial<947, 4> { using ZPZ = aerobus::zpz<947>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<8>, ZPZV<894>, ZPZV<2»; };  // NOLINT
04956 template<> struct ConwayPolynomial<947, 5> { using ZPZ = aerobus::zpz<947>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<945»; };  // NOLINT
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04957 template<> struct ConwayPolynomial<947, 6> { using ZPZ = aerobus::zpz<947>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<880>, ZPZV<787>, ZPZV<95>, ZPZV<2>>; };  // NOLINT
04958 template<> struct ConwayPolynomial<947, 7> { using ZPZ = aerobus::zpz<947>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<945>>; };  // NOLINT
04959 template<> struct ConwayPolynomial<947, 8> { using ZPZ = aerobus::zpz<947>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<845>, ZPZV<597>, ZPZV<581>, ZPZV<2>>; };  //
      NOLINT
04960 template<> struct ConwayPolynomial<947, 9> { using ZPZ = aerobus::zpz<947>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<269>, ZPZV<808>, ZPZV<945>>;
      };  // NOLINT
04961 template<> struct ConwayPolynomial<953, 1> { using ZPZ = aerobus::zpz<953>; using type =
      POLYV<ZPZV<1>, ZPZV<950>>; };  // NOLINT
04962 template<> struct ConwayPolynomial<953, 2> { using ZPZ = aerobus::zpz<953>; using type =
      POLYV<ZPZV<1>, ZPZV<947>, ZPZV<3>>; };  // NOLINT
04963 template<> struct ConwayPolynomial<953, 3> { using ZPZ = aerobus::zpz<953>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<7>, ZPZV<950>>; };  // NOLINT
04964 template<> struct ConwayPolynomial<953, 4> { using ZPZ = aerobus::zpz<953>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<865>, ZPZV<3>>; };  // NOLINT
04965 template<> struct ConwayPolynomial<953, 5> { using ZPZ = aerobus::zpz<953>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<950>>; };  // NOLINT
04966 template<> struct ConwayPolynomial<953, 6> { using ZPZ = aerobus::zpz<953>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<507>, ZPZV<829>, ZPZV<730>, ZPZV<3>>; };  // NOLINT
04967 template<> struct ConwayPolynomial<953, 7> { using ZPZ = aerobus::zpz<953>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<5>, ZPZV<950>>; };  // NOLINT
04968 template<> struct ConwayPolynomial<953, 8> { using ZPZ = aerobus::zpz<953>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<6>, ZPZV<579>, ZPZV<658>, ZPZV<108>, ZPZV<3>>; };  //
      NOLINT
04969 template<> struct ConwayPolynomial<953, 9> { using ZPZ = aerobus::zpz<953>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<819>, ZPZV<316>, ZPZV<950>>;
      };  // NOLINT
04970 template<> struct ConwayPolynomial<967, 1> { using ZPZ = aerobus::zpz<967>; using type =
      POLYV<ZPZV<1>, ZPZV<962>>; };  // NOLINT
04971 template<> struct ConwayPolynomial<967, 2> { using ZPZ = aerobus::zpz<967>; using type =
      POLYV<ZPZV<1>, ZPZV<965>, ZPZV<5>>; };  // NOLINT
04972 template<> struct ConwayPolynomial<967, 3> { using ZPZ = aerobus::zpz<967>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<962>>; };  // NOLINT
04973 template<> struct ConwayPolynomial<967, 4> { using ZPZ = aerobus::zpz<967>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<963>, ZPZV<5>>; };  // NOLINT
04974 template<> struct ConwayPolynomial<967, 5> { using ZPZ = aerobus::zpz<967>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<2>, ZPZV<962>>; };  // NOLINT
04975 template<> struct ConwayPolynomial<967, 6> { using ZPZ = aerobus::zpz<967>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<805>, ZPZV<948>, ZPZV<831>, ZPZV<5>>; };  // NOLINT
04976 template<> struct ConwayPolynomial<967, 7> { using ZPZ = aerobus::zpz<967>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<962>>; };  // NOLINT
04977 template<> struct ConwayPolynomial<967, 8> { using ZPZ = aerobus::zpz<967>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<840>, ZPZV<502>, ZPZV<136>, ZPZV<5>>; };  //
      NOLINT
04978 template<> struct ConwayPolynomial<967, 9> { using ZPZ = aerobus::zpz<967>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<512>, ZPZV<783>, ZPZV<962>>;
      };  // NOLINT
04979 template<> struct ConwayPolynomial<971, 1> { using ZPZ = aerobus::zpz<971>; using type =
      POLYV<ZPZV<1>, ZPZV<965>>; };  // NOLINT
04980 template<> struct ConwayPolynomial<971, 2> { using ZPZ = aerobus::zpz<971>; using type =
      POLYV<ZPZV<1>, ZPZV<970>, ZPZV<6>>; };  // NOLINT
04981 template<> struct ConwayPolynomial<971, 3> { using ZPZ = aerobus::zpz<971>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<3>, ZPZV<965>>; };  // NOLINT
04982 template<> struct ConwayPolynomial<971, 4> { using ZPZ = aerobus::zpz<971>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<527>, ZPZV<6>>; };  // NOLINT
04983 template<> struct ConwayPolynomial<971, 5> { using ZPZ = aerobus::zpz<971>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<14>, ZPZV<965>>; };  // NOLINT
04984 template<> struct ConwayPolynomial<971, 6> { using ZPZ = aerobus::zpz<971>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<970>, ZPZV<729>, ZPZV<718>, ZPZV<6>>; };  // NOLINT
04985 template<> struct ConwayPolynomial<971, 7> { using ZPZ = aerobus::zpz<971>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<13>, ZPZV<965>>; };  // NOLINT
04986 template<> struct ConwayPolynomial<971, 8> { using ZPZ = aerobus::zpz<971>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<725>, ZPZV<281>, ZPZV<206>, ZPZV<6>>; };  //
      NOLINT
04987 template<> struct ConwayPolynomial<971, 9> { using ZPZ = aerobus::zpz<971>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<805>, ZPZV<473>, ZPZV<965>>;
      };  // NOLINT
04988 template<> struct ConwayPolynomial<977, 1> { using ZPZ = aerobus::zpz<977>; using type =
      POLYV<ZPZV<1>, ZPZV<974>>; };  // NOLINT
04989 template<> struct ConwayPolynomial<977, 2> { using ZPZ = aerobus::zpz<977>; using type =
      POLYV<ZPZV<1>, ZPZV<972>, ZPZV<3>>; };  // NOLINT
04990 template<> struct ConwayPolynomial<977, 3> { using ZPZ = aerobus::zpz<977>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<974>>; };  // NOLINT
04991 template<> struct ConwayPolynomial<977, 4> { using ZPZ = aerobus::zpz<977>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<800>, ZPZV<3>>; };  // NOLINT
04992 template<> struct ConwayPolynomial<977, 5> { using ZPZ = aerobus::zpz<977>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<11>, ZPZV<974>>; };  // NOLINT
04993 template<> struct ConwayPolynomial<977, 6> { using ZPZ = aerobus::zpz<977>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<729>, ZPZV<830>, ZPZV<753>, ZPZV<3>>; };  // NOLINT
04994 template<> struct ConwayPolynomial<977, 7> { using ZPZ = aerobus::zpz<977>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<974>>; };  // NOLINT
04995 template<> struct ConwayPolynomial<977, 8> { using ZPZ = aerobus::zpz<977>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<855>, ZPZV<807>, ZPZV<77>, ZPZV<3>>; };  //
      NOLINT
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04996 template<> struct ConwayPolynomial<977, 9> { using ZPZ = aerobus::zpz<977>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<450>, ZPZV<740>, ZPZV<974»;
      };  // NOLINT
04997 template<> struct ConwayPolynomial<983, 1> { using ZPZ = aerobus::zpz<983>; using type =
      POLYV<ZPZV<1>, ZPZV<978»; };  // NOLINT
04998 template<> struct ConwayPolynomial<983, 2> { using ZPZ = aerobus::zpz<983>; using type =
      POLYV<ZPZV<1>, ZPZV<981>, ZPZV<5»; };  // NOLINT
04999 template<> struct ConwayPolynomial<983, 3> { using ZPZ = aerobus::zpz<983>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<1>, ZPZV<978»; };  // NOLINT
05000 template<> struct ConwayPolynomial<983, 4> { using ZPZ = aerobus::zpz<983>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<5>, ZPZV<567>, ZPZV<5»; };  // NOLINT
05001 template<> struct ConwayPolynomial<983, 5> { using ZPZ = aerobus::zpz<983>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<8>, ZPZV<978»; };  // NOLINT
05002 template<> struct ConwayPolynomial<983, 6> { using ZPZ = aerobus::zpz<983>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<849>, ZPZV<296>, ZPZV<228>, ZPZV<5»; };  // NOLINT
05003 template<> struct ConwayPolynomial<983, 7> { using ZPZ = aerobus::zpz<983>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<978»; };  // NOLINT
05004 template<> struct ConwayPolynomial<983, 8> { using ZPZ = aerobus::zpz<983>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<738>, ZPZV<276>, ZPZV<530>, ZPZV<5»; };  //
      NOLINT
05005 template<> struct ConwayPolynomial<983, 9> { using ZPZ = aerobus::zpz<983>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<858>, ZPZV<87>, ZPZV<978»;
      };  // NOLINT
05006 template<> struct ConwayPolynomial<991, 1> { using ZPZ = aerobus::zpz<991>; using type =
      POLYV<ZPZV<1>, ZPZV<985»; };  // NOLINT
05007 template<> struct ConwayPolynomial<991, 2> { using ZPZ = aerobus::zpz<991>; using type =
      POLYV<ZPZV<1>, ZPZV<989>, ZPZV<6»; };  // NOLINT
05008 template<> struct ConwayPolynomial<991, 3> { using ZPZ = aerobus::zpz<991>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<985»; };  // NOLINT
05009 template<> struct ConwayPolynomial<991, 4> { using ZPZ = aerobus::zpz<991>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<10>, ZPZV<794>, ZPZV<6»; };  // NOLINT
05010 template<> struct ConwayPolynomial<991, 5> { using ZPZ = aerobus::zpz<991>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<3>, ZPZV<985»; };  // NOLINT
05011 template<> struct ConwayPolynomial<991, 6> { using ZPZ = aerobus::zpz<991>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<637>, ZPZV<855>, ZPZV<278>, ZPZV<6»; };  // NOLINT
05012 template<> struct ConwayPolynomial<991, 7> { using ZPZ = aerobus::zpz<991>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<7>, ZPZV<985»; };  // NOLINT
05013 template<> struct ConwayPolynomial<991, 8> { using ZPZ = aerobus::zpz<991>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<15>, ZPZV<941>, ZPZV<786>, ZPZV<234>, ZPZV<6»; };  //
      NOLINT
05014 template<> struct ConwayPolynomial<991, 9> { using ZPZ = aerobus::zpz<991>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<9>, ZPZV<466>, ZPZV<222>, ZPZV<985»;
      };  // NOLINT
05015 template<> struct ConwayPolynomial<997, 1> { using ZPZ = aerobus::zpz<997>; using type =
      POLYV<ZPZV<1>, ZPZV<990»; };  // NOLINT
05016 template<> struct ConwayPolynomial<997, 2> { using ZPZ = aerobus::zpz<997>; using type =
      POLYV<ZPZV<1>, ZPZV<995>, ZPZV<7»; };  // NOLINT
05017 template<> struct ConwayPolynomial<997, 3> { using ZPZ = aerobus::zpz<997>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<2>, ZPZV<990»; };  // NOLINT
05018 template<> struct ConwayPolynomial<997, 4> { using ZPZ = aerobus::zpz<997>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<4>, ZPZV<622>, ZPZV<7»; };  // NOLINT
05019 template<> struct ConwayPolynomial<997, 5> { using ZPZ = aerobus::zpz<997>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<10>, ZPZV<990»; };  // NOLINT
05020 template<> struct ConwayPolynomial<997, 6> { using ZPZ = aerobus::zpz<997>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<981>, ZPZV<58>, ZPZV<260>, ZPZV<7»; };  // NOLINT
05021 template<> struct ConwayPolynomial<997, 7> { using ZPZ = aerobus::zpz<997>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<1>, ZPZV<990»; };  // NOLINT
05022 template<> struct ConwayPolynomial<997, 8> { using ZPZ = aerobus::zpz<997>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<934>, ZPZV<473>, ZPZV<241>, ZPZV<7»; };  //
      NOLINT
05023 template<> struct ConwayPolynomial<997, 9> { using ZPZ = aerobus::zpz<997>; using type =
      POLYV<ZPZV<1>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<0>, ZPZV<39>, ZPZV<732>, ZPZV<616>, ZPZV<990»;
      };  // NOLINT
05024 #endif  // AEROBUS_CONWAY_IMPORTS
05025
05026 #endif // __INC_AEROBUS__ // NOLINT
```

Chapter 7

Examples

7.1 QuotientRing

inject a 'constant' in quotient ring <i32, i32::val<2>>::inject_constant_t<1>

inject a 'constant' in quotient ring <i32, i32::val<2>>::inject_constant_t<1>

Template Parameters

x	a 'constant' from Ring point of view

7.2 type_list

A list of types <int, double, float>

A list of types <int, double, float>

Template Parameters

...Ts	types to store and manipulate at compile time

7.3 i32::template

inject a native constant

inject a native constant

Template Parameters

x	inject_constant_2<2> -> i32::template val<2>

7.4 i32::add_t

addition operator yields v1 + v2 <i32::val<2>, i32::val<3>>

addition operator yields v1 + v2 <i32::val<2>, i32::val<3>>

Template Parameters

v1	a value in i32
v2	a value in i32

7.5 i32::sub_t

substraction operator yields v1 - v2 <i32::val<3>, i32::val<2>>

substraction operator yields v1 - v2 <i32::val<3>, i32::val<2>>

Template Parameters

v1	a value in i32
v2	a value in i32

7.6 i32::mul_t

multiplication operator yields v1 ∗ v2 <i32::val<3>, i32::val<2>>

multiplication operator yields v1 ∗ v2 <i32::val<3>, i32::val<2>>

Template Parameters

v1	a value in i32
v2	a value in i32

7.7 i32::div_t

division operator yields v1 / v2 <i32::val<7>, i32::val<2>> -> i32::val<3>

division operator yields v1 / v2 <i32::val<7>, i32::val<2>> -> i32::val<3>

Template Parameters

v1	a value in i32
v2	a value in i32

7.8 i32::gt_t

strictly greater operator (v1 > v2) yields v1 > v2 <i32::val<7>, i32::val<2>>

strictly greater operator (v1 > v2) yields v1 > v2 <i32::val<7>, i32::val<2>>

Template Parameters

v1	a value in i32
v2	a value in i32

7.9 i32::eq_t

equality operator (type) yields v1 == v2 as std::integral_constant<bool> <i32::val<2>, i32::val<2>>

equality operator (type) yields v1 == v2 as std::integral_constant<bool> <i32::val<2>, i32::val<2>>

Template Parameters

v1	a value in i32
v2	a value in i32

7.10 i32::eq_v

equality operator (boolean value)

equality operator (boolean value)

Template Parameters

v1	
v2	<i32::val<1>, i32::val<1>>

7.11 i32::gcd_t

greatest common divisor yields GCD(v1, v2) <i32::val<6>, i32::val<15>>

greatest common divisor yields GCD(v1, v2) <i32::val<6>, i32::val<15>>

Template Parameters

v1	a value in i32
v2	a value in i32

7.12 i32::pos_t

positivity operator yields v > 0 as std::true_type or std::false_type <i32::val<1

positivity operator yields v > 0 as std::true_type or std::false_type <i32::val<1

Template Parameters

v	a value in i32

7.13 i32::pos_v

positivity (boolean value) yields v > 0 as boolean value

positivity (boolean value) yields v > 0 as boolean value

Template Parameters

v	a value in i32 <i32::val<1>>

7.14 i64::template

injects constant as an i64 value

injects constant as an i64 value

Template Parameters

x	inject_constant_t<2>

7.15 i64::add_t

addition operator

addition operator

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<1>, i64::val<2>>

7.16 i64::sub_t

substraction operator

substraction operator

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<1>, i64::val<2>>

7.17 i64::mul_t

multiplication operator

multiplication operator

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<1>, i64::val<2>>

7.18 i64::div_t

division operator integer division

division operator integer division

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<1>, i64::val<2>>

7.19 i64::mod_t

modulus operator

modulus operator

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<6>, i64::val<15>>

7.20 i64::gt_t

strictly greater operator yields v1 > v2 as std::true_type or std::false_type

strictly greater operator yields v1 > v2 as std::true_type or std::false_type

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<2>, i64::val<1>>

7.21 i64::lt_t

strict less operator yields v1 < v2 as std::true_type or std::false_type

strict less operator yields v1 < v2 as std::true_type or std::false_type

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<1>, i64::val<2>>

7.22 i64::lt_v

strictly smaller operator yields v1 < v2 as boolean value

strictly smaller operator yields v1 < v2 as boolean value

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<1>, i64::val<2>>

7.23 i64::eq_t

equality operator yields v1 == v2 as std::true_type or std::false_type

equality operator yields v1 == v2 as std::true_type or std::false_type

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<2>, i64::val<2>>

7.24 i64::eq_v

equality operator yields v1 == v2 as boolean value

equality operator yields v1 == v2 as boolean value

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<2>, i64::val<2>>

7.25 i64::gcd_t

greatest common divisor yields GCD(v1, v2) as instanciation of i64::val

greatest common divisor yields GCD(v1, v2) as instanciation of i64::val

Template Parameters

v1	: an element of aerobus::i64::val
v2	: an element of aerobus::i64::val <i64::val<6>, i64::val<15>>

7.26 i64::pos_t

is v posititive yields v > 0 as std::true_type or std::false_type

is v posititive yields v > 0 as std::true_type or std::false_type

Template Parameters

v1	: an element of aerobus::i64::val <i64::val<1>>

7.27 i64::pos_v

positivity yields v > 0 as boolean value

positivity yields v > 0 as boolean value

Template Parameters

v	: an element of aerobus::i64::val <i64::val<1>>

7.28 polynomial

makes the constant (native type) polynomial a_0

makes the constant (native type) polynomial a_0

Template Parameters

x	<i32>::template inject_constant_t<2>

7.29 q32::add_t

addition operator

addition operator

Template Parameters

v1	a value
v2	a value <q32::val<i32::val<1>, i32::val<2>>, q32::val<i32::val<1>, i32::val<3>>>

7.30 FractionField

Fraction field of an euclidean domain, such as Q for Z.

Fraction field of an euclidean domain, such as Q for Z

Template Parameters

Ring	<i64> is q64 (rationals with 64 bits numerator and denominator)

7.31 PI_fraction::val

representation of PI as a continued fraction -> 3.14...

7.32 E_fraction::val

approximation of e -> 2.718...

approximation of e -> 2.718...

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