beamer examples

created with beamer 3.x

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Part I

Tutorial

Contents

What Are Prime Numbers?

A prime number is a number that has exactly two divisors.

What Are Prime Numbers?

Definition

A prime number is a number that has exactly two divisors

Example

- 2 is prime (two divisors: 1 and 2).
- 3 is prime (two divisors: 1 and 3).
- 4 is not prime (three divisors: 1, 2, and 4).

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There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

Theorem

There is no largest prime number.

Proof.

1. Suppose p were the largest prime number.

4. Thus $q + 1$ is also prime and greater than p. □

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What's Still To Do?

Answered Questions

How many primes are there?

Open Questions

Is every even number the sum of two primes?

What's Still To Do?

- Answered Questions
  - How many primes are there?
- Open Questions
  - Is every even number the sum of two primes?

What's Still To Do?

Answered Questions

How many primes are there?

Open Questions

Is every even number the sum of two primes? [1]

An Algorithm For Finding Primes Numbers.

```
int main (void)
{
  std::vector<bool> is_prime (100, true);
  for (int i = 2; i < 100; i++)
    if (is_prime[i])
      {
        std::cout << i << " ";
        for (int j = i; j < 100;
             is_prime [j] = false, j+=i);
      }
  return 0;
}
```

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        std::cout << i << " ";
        for (int j = i; j < 100;
             is_prime [j] = false, j+=i);
      }
 return 0;
}
```

Note the use of `std::`.

Part II

Howtos

Contents

- First point.

- First point.

- First point.
- Second point.

- First point.
- Second point.

- First point.
- Second point.
- Third point.

- First point.
- Second point.
- Third point.

- First point.
- Second point.
- Third point.

- First point.
- Second point.
- Third point.

- First point.
- Second point.

- First point.
- Second point.
- Third point.

- First point.
- Second point.
- Third point.

- First point.
- Second point.
- Third point.

- First point.

or

- First point.

- First point.
- Second point.

or

- First point.
- Second point.

- First point.
- Second point.
- Third point.

or

- First point.
- Second point.
- Third point.

g a ballot First point.

and

g a ballot First point.

- First point.

g a ballot Second point.

and

- First point.

g a ballot Second point.

- First point.
- Second point.

g a ballot Third point.

and

- First point.
- Second point.

g a ballot Third point.

In the following example, more and more items become "checked" from slide to slide:

g a ballot First point.

- Second point.
- Third point.

In the following example, more and more items become "checked" from slide to slide:

g a ballot First point.

g a ballot Second point.

- Third point.

In the following example, more and more items become "checked" from slide to slide:

g a ballot First point.

g a ballot Second point.

g a ballot Third point.

In the following example, more and more items become "checked" from slide to slide:

g a ballot First point.

g a ballot Second point.

g a ballot Third point.

Uncovering Tagged Formulas Piecewise

$$A = B \tag{1}$$

Uncovering Tagged Formulas Piecewise

$$A = B \tag{1}$$
$$= C \tag{2}$$

Uncovering Tagged Formulas Piecewise

$$A = B \tag{1}$$
$$= C \tag{2}$$
$$= D \tag{3}$$

Part III

Building a Presentation

Contents

Contents

Contents

Contents

Contents

- Shown from first slide on.

- Shown from first slide on.

- Shown from first slide on.
- Shown from second slide on.
  - Shown from second slide on.

- Shown from first slide on.

- Shown from first slide on.
- Shown from second slide on.
  - Shown from second slide on.
  - Shown from third slide on.
- Shown from third slide on.

- Shown from first slide on.

- Shown from first slide on.
- Shown from second slide on.
  - Shown from second slide on.
  - Shown from third slide on.
- Shown from third slide on.
- Shown from fourth slide on.

Shown from fourth slide on.

- Shown from first slide on.

- Shown from first slide on.
- Shown from second slide on.
  - Shown from second slide on.
  - Shown from third slide on.
- Shown from third slide on.
- Shown from fourth slide on.

Shown from fourth slide on.

- Shown from first slide on.
- Shown from fifth slide on.

This line is bold on all three slides. This line is bold only on the second slide. This line is bold only on the third slide.

This line is bold on all three slides. This line is bold only on the second slide. This line is bold only on the third slide.

This line is bold on all three slides. This line is bold only on the second slide. **This line is bold only on the third slide.**

This line is inserted only on slide 1.

This line is inserted only on slide 2.

Shown on first slide.

Shown on all slides.

Shown on first slide. Shown on second and third slide.

- Still shown on the second and third slide.

Shown on all slides.

Shown on first slide. Shown on second and third slide.

- Still shown on the second and third slide.

Shown on all slides.

Shown on first slide.

- Shown from slide 4 on.

Shown from slide 4 on. Shown on all slides.

Same effect as the following command. Same effect as the previous command.

Same effect as the following command. Same effect as the previous command.

Same effect as the following command. Same effect as the previous command.

Shown on 1, 2 Shown on 1, 2, 4

Shown on 1, 2 Shown on 1, 2, 4

Shown on 3, 4 Shown on 3, 5

Shown on 3, 4 Shown on 1, 2, 4

Shown 5, 6, 7, ... Shown on 3, 5

- First item.
- Second item.
- Third item.
- Fourth item.

- First item.
- Second item.
- Third item.
- Fourth item.

- First item.
- Second item.
- Third item.
- Fourth item.

- First item.
- Second item.
- Third item.
- Fourth item.

1. The first and main point.

1. The first and main point.
2. The second point.

0. A zeroth point, shown at the very end.
1. The first and main point.
2. The second point.

A Theorem on Infinite Sets

Theorem

There exists an infinite set.

A Theorem on Infinite Sets

Theorem

There exists an infinite set.

Example

The set of natural numbers is infinite.

A Theorem on Infinite Sets

Theorem

There exists an infinite set.

Proof.

This follows from the axiom of infinity. □

Example

The set of natural numbers is infinite.

This line is always shown.

This line is always shown. This line is inserted on slide 2.

This [word] is in round brackets on slide 2 and in square brackets on slide 1.

This (word) is in round brackets on slide 2 and in square brackets on slide 1.

Some text for the first slide.
Possibly several lines long.

Replacement on the second slide.

Some text for the first slide.
Possibly several lines long.

Replacement on the second slide. Supressed for handout.

This text is shown the same way as the text below.

This text is shown the same way as the text below. This text is shown the same way as the text above.

This text is shown the same way as the text below. This text is shown the same way as the text above.

This text is shown the same way as the text below. This text is shown the same way as the text above.

This text is shown the same way as the text below. This text is shown the same way as the text above.

This text is shown the same way as the text below. This text is shown the same way as the text above.

- Apple

- Apple
- Peach

- Apple
- Peach
- Plum

- Apple
- Peach
- Plum
- Orange

- Apple
- Peach
- Plum
- Orange

- Apple

- Apple
- Peach
- Plum
- Orange

- Apple
- Peach

- Apple
- Peach
- Plum
- Orange

- Apple
- Peach
- Plum

- Apple
- Peach
- Plum
- Orange

- Apple
- Peach
- Plum
- Orange

- Apple
- Peach
- Plum
- Orange

- Apple
- Peach
- Plum
- Orange

- This is important.

- Apple
- Peach
- Plum
- Orange

- Apple
- Peach
- Plum
- Orange

- This is important.
- We want to highlight this and this.

- Apple
- Peach
- Plum
- Orange

- Apple
- Peach
- Plum
- Orange

- This is important.
- We want to highlight this and this.
- What is the matrix?

- First item.

Jump to second slide

- First item.
- Second item.

Jump to second slide

- First item.
- Second item.
- Third item.

Jump to second slide

- First item.

Jump to second slide

- First item.
- Second item.

Jump to second slide

- First item.
- Second item.
- Third item.

Jump to second slide

Theorem

...

Skip proof

Theorem

...

Proof.

...

□

There are three important points:

1. A first one,

There are three important points:

1. A first one,
2. a second one with a bunch of subpoints,
   - first subpoint. (Only shown from second slide on!).

There are three important points:

1. A first one,
2. a second one with a bunch of subpoints,
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   - second subpoint added on third slide.

There are three important points:

1. A first one,
2. a second one with a bunch of subpoints,
   - first subpoint. (Only shown from second slide on!).
   - second subpoint added on third slide.
   - third subpoint added on fourth slide.

There are three important points:

1. A first one,
2. a second one with a bunch of subpoints,
   - first subpoint. (Only shown from second slide on!).
   - second subpoint added on third slide.
   - third subpoint added on fourth slide.
3. and a third one.

- This is shown from the first slide on.

- This is shown from the first slide on.

- This is shown from the first slide on.
- This is shown from the second slide on.

- This is shown from the first slide on.

- This is shown from the first slide on.
- This is shown from the second slide on.
- This is shown from the third slide on.
- This is shown from the first slide on.

- This is shown from the first slide on.
- This is shown from the second slide on.
- This is shown from the third slide on.
- This is shown from the first slide on.
- This is shown from the fourth slide on.

short Some text.

short	Some text.
longest label	Some text.

short Some text.

longest label Some text.

long label Some text.

Definition

A set consists of elements.

Wrong Theorem

$1 = 2$.

Definition

A set consists of elements.

Wrong Theorem

$1 = 2$.

Example

The set $\{1, 2, 3, 5\}$ has four elements.

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Example (Natural Numbers)

The set of natural numbers is infinite.

beamer examples

Matthias Pospiech

Typesetting a postit:

Place me somewhere!

Theorem

$A = B$.

Two
lines.

One line (but aligned).

Fadeout Frame

anomations only work in full screen mode in Acrobat Reader ! This text (and all other frame content) will fade out when the second slide is shown. This even works with colored text.

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Flying Theorems (You Really Shouldn't!)

Theorem

This theorem flies out.

Flying Theorems (You Really Shouldn't!)

Theorem

This theorem flies out.

Flying Theorems (You Really Shouldn't!)

Theorem

This theorem flies out.

Flying Theorems (You Really Shouldn't!)

Theorem

This theorem flies out.

in.

Flying Theorems (You Really Shouldn't!)

heorem

his theorem flies out.

es in.

Flying Theorems (You Really Shouldn't!)

orem

theorem flies out.

flies in.

Flying Theorems (You Really Shouldn't!)

em

eorem flies out.

m flies in.

Flying Theorems (You Really Shouldn't!)

rem flies out.

rem flies in.

Flying Theorems (You Really Shouldn't!)

m flies out.

em

eorem flies in.

Flying Theorems (You Really Shouldn't!)

flies out.

orem

theorem flies in.

Flying Theorems (You Really Shouldn't!)

es out.

heorem

his theorem flies in.

Flying Theorems (You Really Shouldn't!)

out.

Theorem

This theorem flies in.

Flying Theorems (You Really Shouldn't!)

ut.

Theorem

This theorem flies in.

Flying Theorems (You Really Shouldn't!)

Theorem

This theorem flies in.

Flying Theorems (You Really Shouldn't!)

Theorem

This theorem flies in.

Slide Transitions only work in full screen mode in Acrobat Reader !

Example (examples for Slide Transitions)

This line is shown on each slide of slide transitions

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Slide Transitions only work in full screen mode in Acrobat Reader !

Example (examples for Slide Transitions)

This line is shown on each slide of slide transitions

- Eggs

- Eggs
- Plants

- Eggs
- Plants
- Animals

[Goldbach, 1742] Christian Goldbach.
A problem we should try to solve before the ISPN '43 deadline,

Letter to Leonhard Euler, 1742.