

My PPT Title

my sub title

its me

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- Eggs

- Eggs
- Plants

- Eggs
- Plants
- Animals

- Apple

- Apple
- Peach

- Apple
- Peach
- Plum

- Apple
- Peach
- Plum
- Orange

Theorem

$$A = B.$$

Theorem

$$A = B.$$

Proof.



Theorem

$$A = B.$$

Proof.

- Clearly, $A = C$.
- Thus $A = B$.



Theorem

$$A = B.$$

Proof.

- Clearly, $A = C$.
- As shown earlier,
- Thus $A = B$.



What Are Prime Numbers?

Definition

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

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Example

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- 3 is prime (two divisors: 1 and 3).

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).

There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

Theorem

There is no largest prime number.

Proof.

- ❶ Suppose p were the largest prime number.
- ❷ But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers. □

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.
- ② Let q be the product of the first p numbers.
- ④ But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.



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Theorem

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- ① Suppose p were the largest prime number.
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- ④ But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers. □

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Whats Still To Do? I

Answered Questions

How many primes are there?

Open Questions

Is every even number the sum of two primes?

Answered Questions

How many primes are there?

Open Questions

Is every even number the sum of two primes?

Answered Questions

How many primes are there?

Whats Still To Do? II

Open Questions

Is every even number the sum of two primes?

Whats Still To Do?

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

Lion King of the savanna.

Tiger King of the jungle.

Paragraph Heading.

Whats Still To Do?

Answered Questions

How many primes are there?

Open Questions

Is every even number the sum of two primes?

Open Questions

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

My PPT Title

Aneesh

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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Note the use of std::.

References



[Goldbach, 1742] Christian Goldbach.

A problem we should try to solve before the ISPN 43 deadline,
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