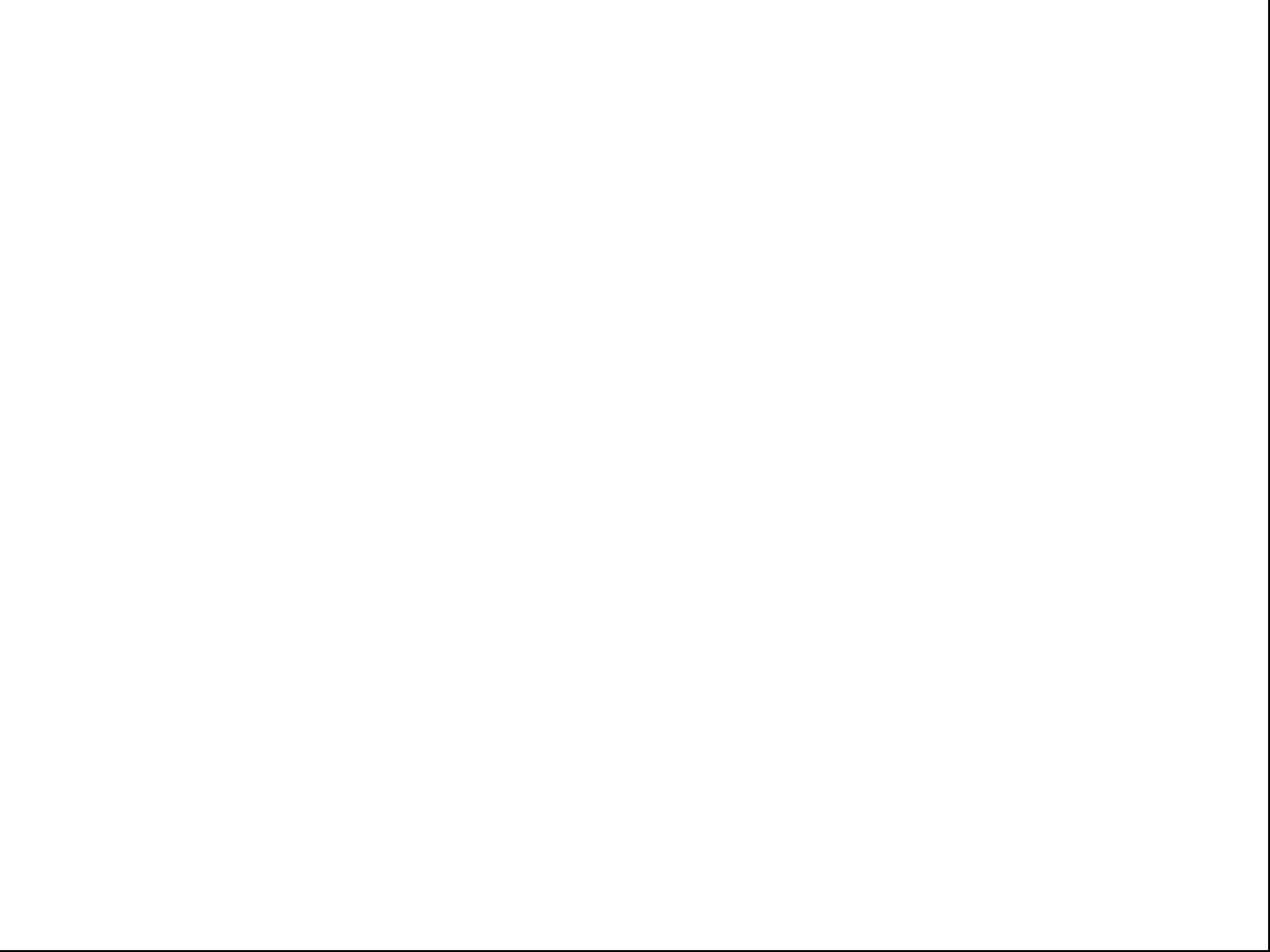


How Many Triangles?



Multiples and Factors

WALT

Find multiples and factors.

Identify lowest common multiples.

Identify highest common factors.

Key Words:

- cube roots
- prime number
- cubes
- square roots
- factor
- squares
- multiple
- triangle number
- power
- triangular number



Key Words:



Tell us four of
the key words!

Multiples

What are multiples?

A multiple is a number that can be divided by another number a certain number of times without a remainder ... like the times table for that number.

Multiples

What are the multiples
of 5?

5, 10, 15, 20, 25 ...

Multiples

Is 55 a multiple of 5?

5, 10, 15, 20, 25 ...

Multiples

Is 725 a multiple of 5?

5, 10, 15, 20, 25 ...

Multiples

What are the multiples
of 3?

3, 6, 9, 12, 15 ...

Multiples

Is 27 a multiple of 3?

3, 6, 9, 12, 15 ...

Multiples

Is 108 a multiple of 3?

3, 6, 9, 12, 15 ...

Multiples

Is 108 a multiple of 3?

3, 6, 9, 12, 15 ...

LCM

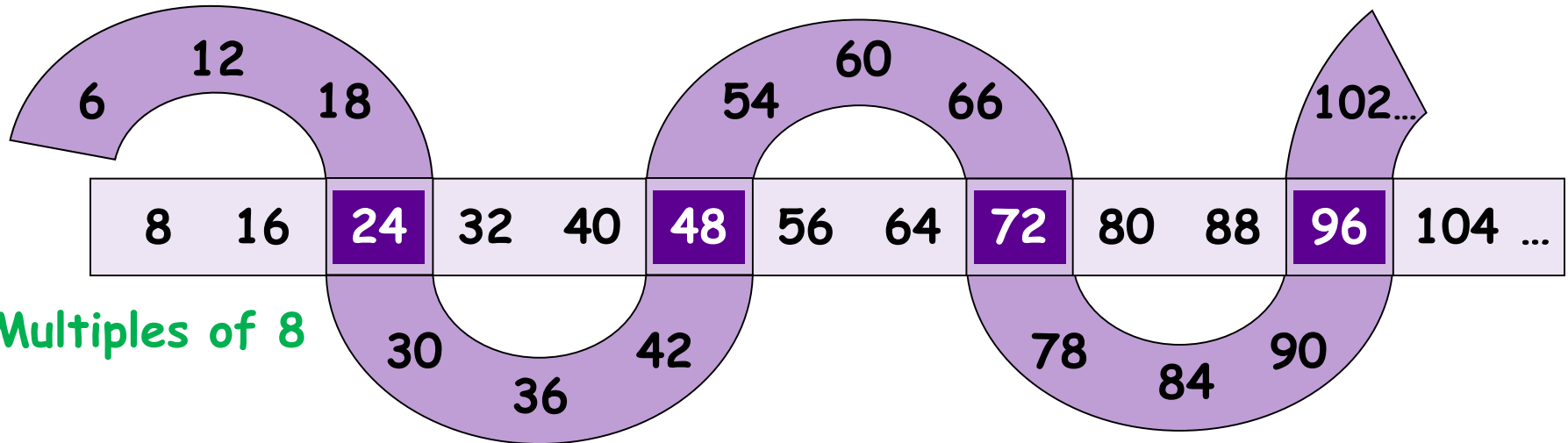
What are Lowest common multiples?

The lowest common multiple of two numbers is the smallest whole number which is a multiple of both.

Common multiples

Let's have a look at the common multiples of 6 and 8

Multiples of 6



Multiples of 8

So 24 is the 'LOWEST COMMON MULTIPLE' of 6 and 8

LCM

Why don't we find the highest common factor?

Because there isn't one ...
multiples go on forever.

'To infinity and beyond!'

LCM

What is the lowest common multiple of 3 and 8?

Multiples of 3 are:

3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ...

Multiples of 8 are:

8, 16, 24, 32, 40

The LCM of 3 and 8 is 24



LCM

What is the lowest common multiple of 6 and 15?

Multiples of 6 are:

6, 12, 18, 24, 30, 36...

Multiples of 15 are:

15, 30, 45, 60

The LCM of 6 and 15 is 30

LCM

What is the lowest common multiple of 15 and 20?

Multiples of 15 are:

15, 30, 45, 60, 75, 90...

Multiples of 20 are:

20, 40, 60, 80

The LCM of 15 and 20 is 60



LCM

Is it possible to find the lowest common multiple of three numbers?

LCM

What is the lowest common multiple of 6, 15 and 20?

Multiples of 6 are:

6, 12, 18, 24, 30, 36, 42, 48, 54, 60.

Multiples of 15 are:

15, 30, 45, 60, 75, 90...

Multiples of 20 are:

20, 40, 60, 80, ...

The LCM of 6, 15 and 20 is 60

PLENARY

- What is a multiple?
- How would you find the LCM?
- How would you find the Highest Common Multiple?