

Try this

1) Fill in the gaps in the following equations:

$$6 = 2 \times \underline{\quad}$$

$$12 = 2 \times \underline{\quad} \times \underline{\quad}$$

$$18 = 3 \times \underline{\quad} \times \underline{\quad}$$

$$36 = 6 \times \underline{\quad} \times \underline{\quad}$$

$$36 = 2 \times \underline{\quad} \times \underline{\quad} \times \underline{\quad}$$

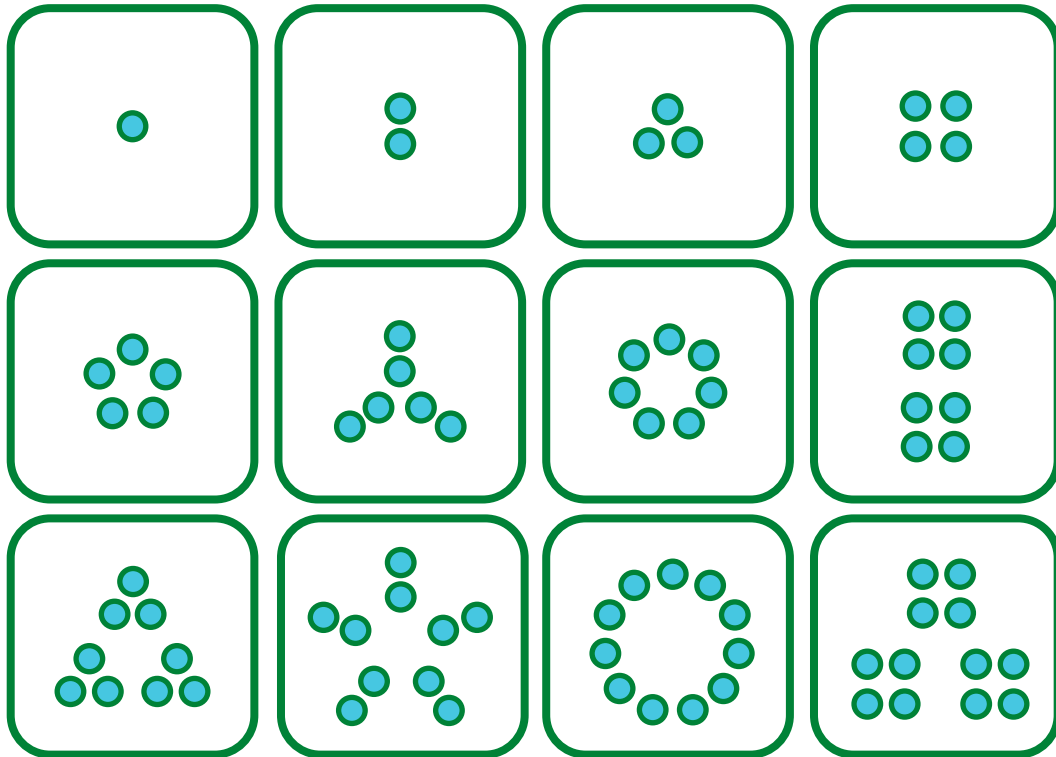
2) How many ways can you fill in the following blanks?

$$36 = \underline{\quad} \times \underline{\quad} \times \underline{\quad}$$



Connect

Representing Integers

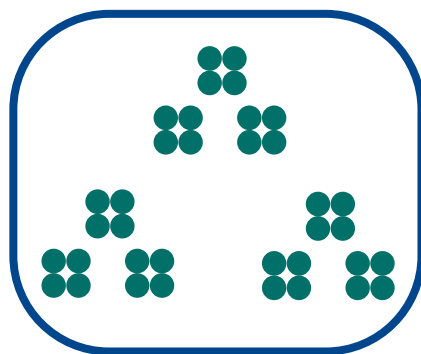


- 1) What do you notice about multiples of 3?
- 2) What do you notice about multiples of 4?
- 3) Is there another way you could have drawn any of these diagrams?

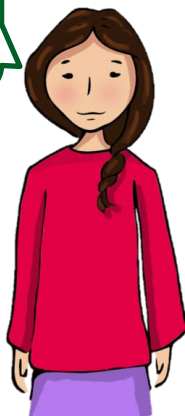


Connect

Two students discuss their strategy for counting dots in this diagram. Who do you agree with and why?



I can see 3
lots of 12



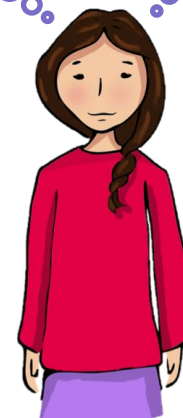
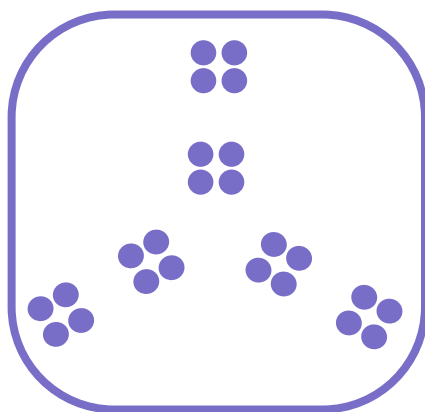
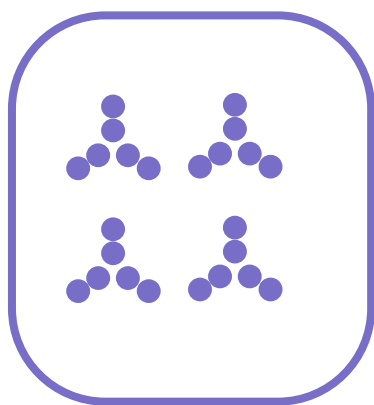
Count the dots in a
different way

I can see 3 lots
of... 3 lots of 4



Connect

A student drew two different pictures to visualise: 4×6



Can you see how she created the diagrams?

Draw a similar diagram to represent 5×3

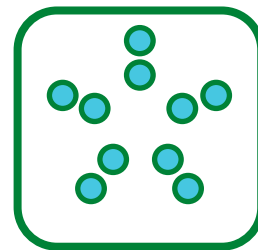


Independent task

Fill in the gaps. Some of the missing words/numbers may be used more than once

Representing a number using diagrams can reveal some of its properties.

One of the ways of representing _____ could be:



5

prime

10

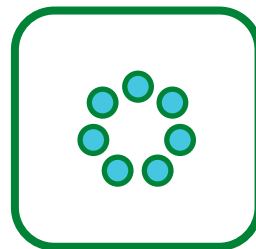
factors

This representation shows that _____ and _____ are both factors of _____.

2

two

One way of representing 7 could be:

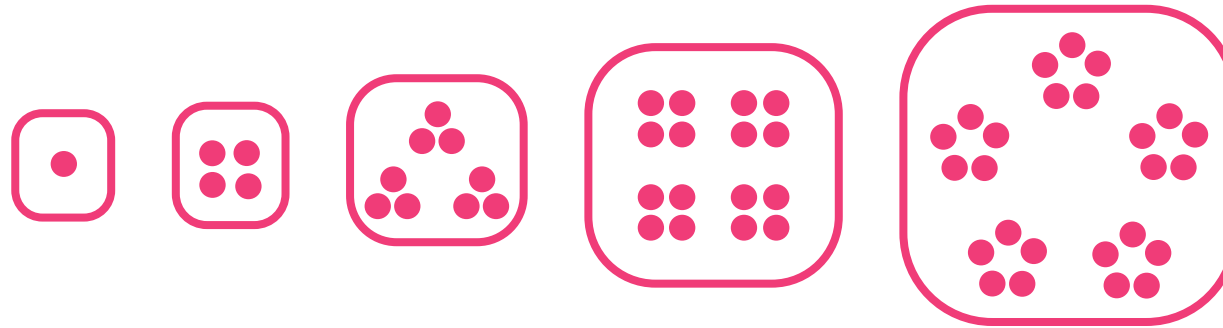


This representation helps to show that 7 only has _____ factors and is therefore _____.



Explore

What sequence of numbers are the groups of dots representing?



What could the next pattern look like?

What can you tell about the numbers from the representations?

