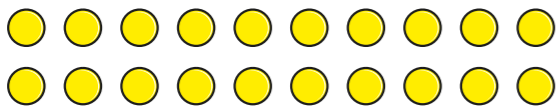
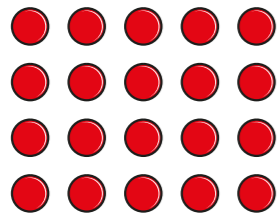


Identify factors of numbers and expressions

1 Use the arrays of 20 counters to find all the factors of 20



Factors of 20: _____

2 a) Draw an array to show that 6 is a factor of 18

b) Draw an array to show that 4 is not a factor of 15

Did you draw the same arrays as a partner?



3 Use a word from the list to complete the sentences.

factor

half

triple

multiple

a) 8 is a _____ of 4

b) 3 is a _____ of 9

c) 10 is a _____ of 10

4 Write a number in each empty box of the two-way table.

	Multiple of 4	Not a multiple of 4
Factor of 60		
Not a factor of 60		

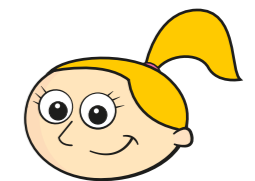
Are there any boxes that could have more than one number?

5 Mo has found the factors of a number.



Mo

Some of the factors of my number are 2, 3, and 8



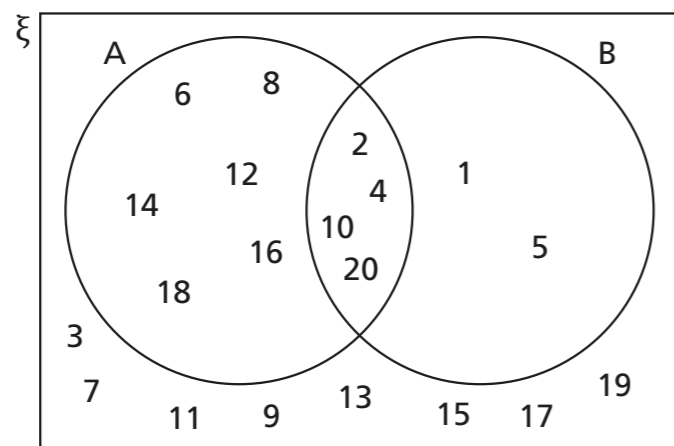
Eva

Mo's number must be 48, as $2 \times 3 \times 8 = 48$

Is Eva correct? _____

How do you know?

- 6 The numbers 1 to 20 are placed on the Venn diagram.

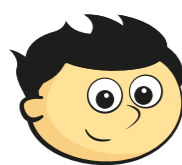


What could each circle in the diagram represent?

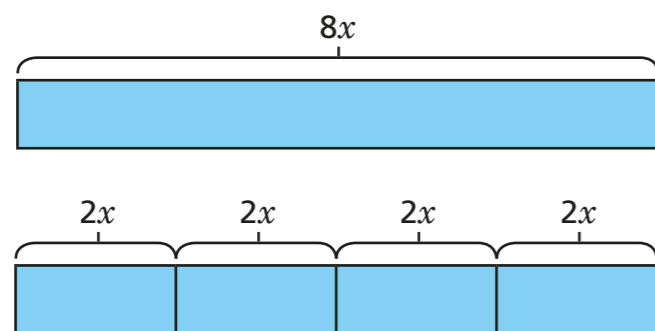
A could represent the _____

B could represent the _____

- 7 Jack uses a bar model to represent $8x$.



I can see that 4 lots of $2x$ is the same as $8x$. Both 4 and $2x$ are factors of $8x$.



Find two more factors of $8x$. You could use bar models to help.

- 8 Find all the factors of the expressions.

a) $24h$

b) $6ab$

- 9 Show that 2 and $6y + 3$ are factors of $12y + 6$

List two other factors of $12y + 6$

- 10 List two factors of each expression.

a) $3c + 6$

b) $8d - 4$

c) $3xy - 3y$

d) $8x + 3y$

