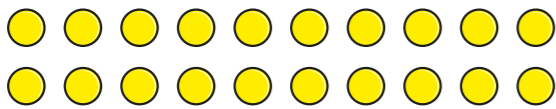
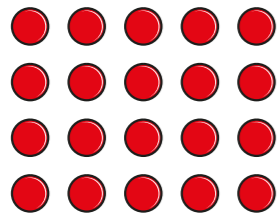


# Identify factors of numbers and expressions

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		

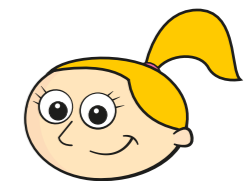
Are there any boxes that could have more than one number?

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? \_\_\_\_\_

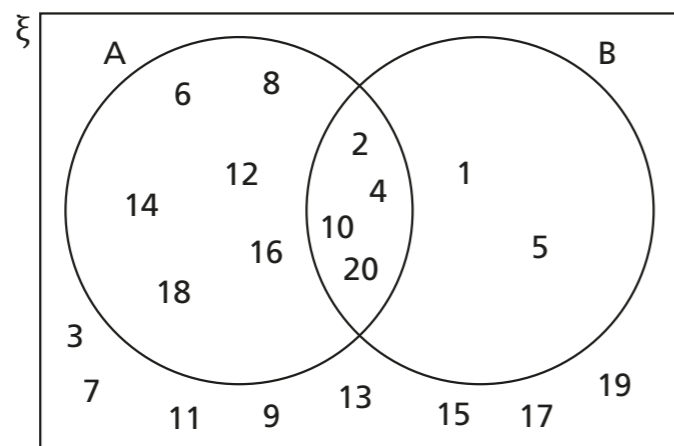
How do you know?

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



What could each circle in the diagram represent?

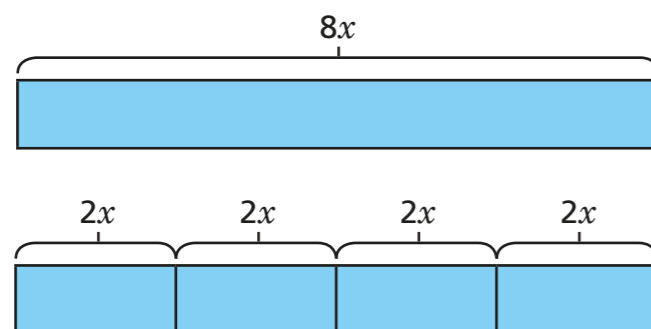
A could represent the \_\_\_\_\_

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)  $8x + 3y$

\_\_\_\_\_

