

COMMON FACTORS



GET READY



1) _____ $\times 7 = 56$

2) $9 \times$ _____ $= 108$

3) Find all the factors of 24

4) Find all the factors of 11

1) 8 $\times 7 = 56$

2) $9 \times \underline{12} = 108$

3) Find all the factors of 24

1, 2, 3, 4, 6, 8, 12, 24

4) Find all the factors of 11

1, 11

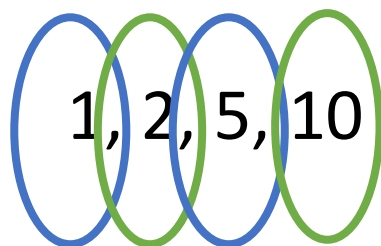
LET'S LEARN



Find all the **common factors** of 10 and 20

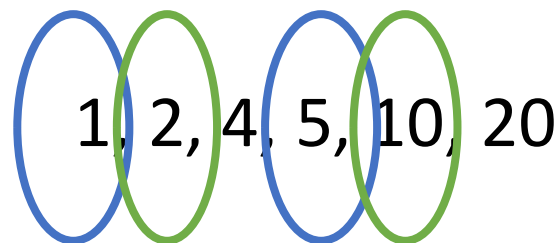
$$1 \times 10 \leftarrow \boxed{10}$$

$$2 \times 5$$



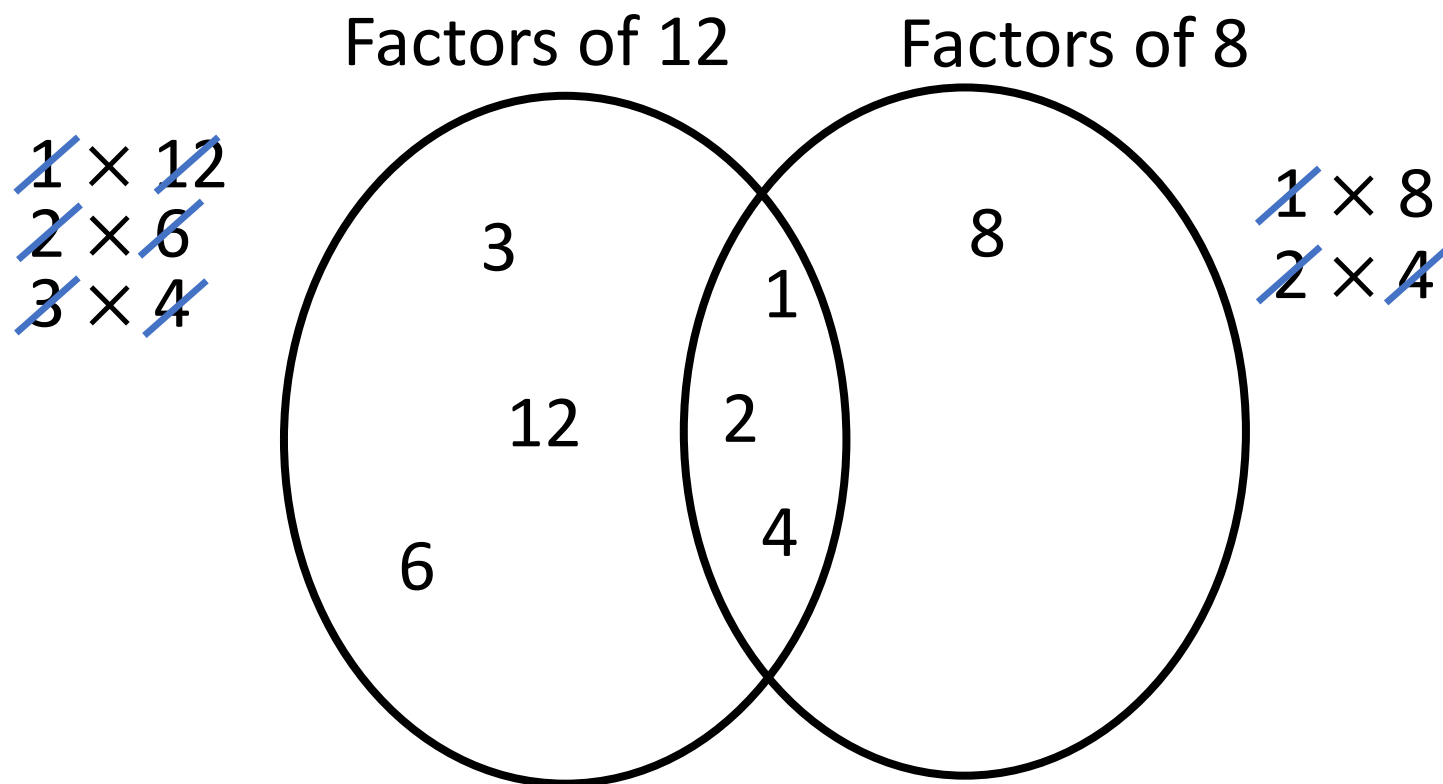
$$1 \times 20 \leftarrow \boxed{20} \rightarrow 4 \times 5$$

$$2 \times 10$$



Common factors: 1, 2, 5, 10

Complete the Venn diagram



Have a think



YOUR TURN

Have a go at questions
1 - 3 on the worksheet



Find a common factor of 80, 160 and 300 that is greater than 15 20

80	160	300
1×80	2×80	$\times 80$
2×40	4×40	$\times 40$
4×20	8×20	15×20
5×16	10×16	$\times 16$
8×10		

Have a think





Tommy

I'm thinking of a 2-digit
number between 20 and 50

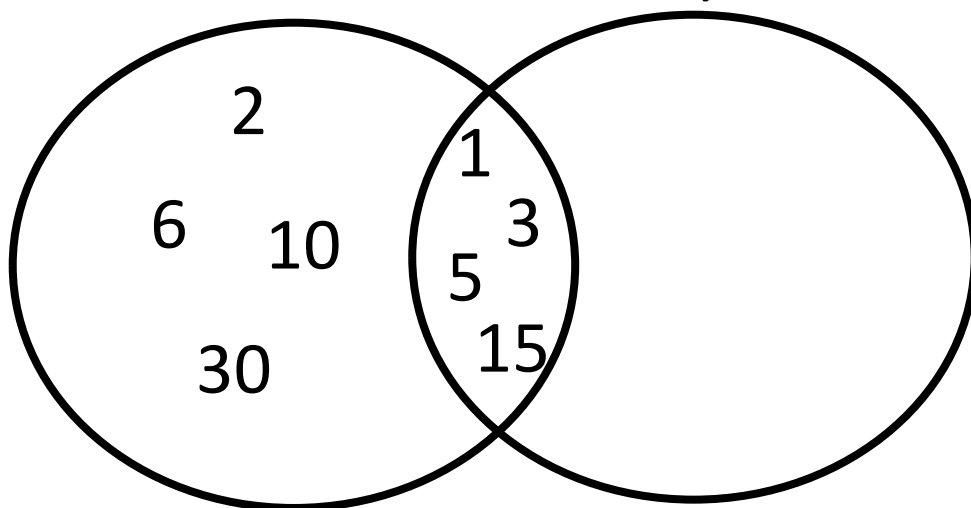


Whitney

My number is 30
The common factors of 30 and Tommy's
number are 1, 3, 5 and 15

Factors of 30

Tommy's number



15
30
45
60

What is Tommy's number?

Can you use common factors to simplify this fraction?

$$\begin{array}{ccc} & \div 2 & \\ \swarrow & & \searrow \\ 18 & & 9 \\ \hline 50 & & 25 \\ \nwarrow & & \nearrow \\ & \div 2 & \end{array}$$

Factors of 18: 1, 2, 3, 6, 9, 18

Factors of 50: 1, 2, 5, 10, 25, 50

Can you use common factors to simplify this fraction?

$$\begin{array}{r} \div 30 \\ \frac{30}{90} \end{array} \quad \begin{array}{r} 1 \\ 3 \\ \div 30 \end{array}$$

Factors of 30: 1, 2, 3, 5, 6, 10, 15, 30

Factors of 90: 1, 2, 3, 5, 6, 9, 15, 30, 45, 90

Have a think



YOUR TURN

Have a go at rest of the
worksheet

