Division using Factors

Watch the video: 'Division Using Factors'

You will need to click on the link below to access the video.
https://whiterosemaths.com/homelearning/year-6/week-5/

Once you have watched the video, please choose your starting question and then complete as many as you can in 40 minutes.

1 Complete the divisions using factors.

a)

260 → $\div$ 10 → ☐ → $\div$ 2 → ☐

260 $\div$ 20 = ☐

b)

360 → $\div$ 10 → ☐ → $\div$ 3 → ☐

360 $\div$ 30 = ☐

1 **c)**

$$240 \longrightarrow \boxed{\div\ 10} \longrightarrow \boxed{} \longrightarrow \boxed{\div\ 6} \longrightarrow \boxed{}$$

$$240 \div \boxed{} = \boxed{}$$

d)

$$480 \longrightarrow \boxed{\div\ 4} \longrightarrow \boxed{} \longrightarrow \boxed{\div\ 6} \longrightarrow \boxed{}$$

$$480 \div \boxed{} = \boxed{}$$

2 Jack and Rosie are calculating 816 ÷ 48

Jack divides by 8 and then by 6

Rosie divides by 12 and then by 4

a) Show that they get the same answer.

b) Explain why Jack and Rosie get the same answer.

_____

_____
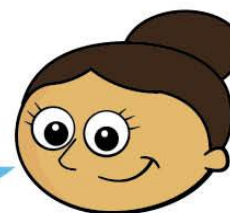
c) Which is the easiest method? Why?

_____

_____

3 Mo and Dora are calculating 2,560 ÷ 16

I will divide by 10, then divide by 6

Mo

I will divide by 4, then divide by 4 again.

Dora

Who is correct? Show your workings.

_____ is correct.

4 Ron is calculating 3,024 ÷ 36

a) Tick the methods that would give the correct answer.

3,024 ÷ 6 ÷ 6   3,024 ÷ 18 ÷ 18   3,024 ÷ 9 ÷ 4

☐   ☐   ☐

b) What other methods could Ron use to calculate 3,024 ÷ 36?

_____

_____

5 Use factors to complete these divisions.

a) 360 ÷ 40 = ☐

b) 625 ÷ 25 = ☐

5 **c)** 1,275 ÷ 15 = ☐

d) 7,200 ÷ 18 = ☐

6 These divisions give the same answer.

Fill in the gaps.

888 ÷ 8 ÷ 3	888 ÷ 6 ÷ ☐	888 ÷ ☐	888 ÷ 2 ÷ 6 ÷ ☐

What is the answer? ☐

a) Calculate the value of c.

9,180

| a | a | a | a | a |

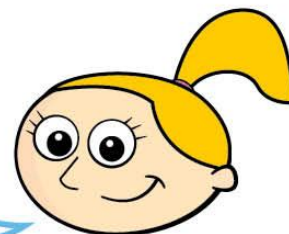| b | b | b |

| c | c |

$c =$ ☐
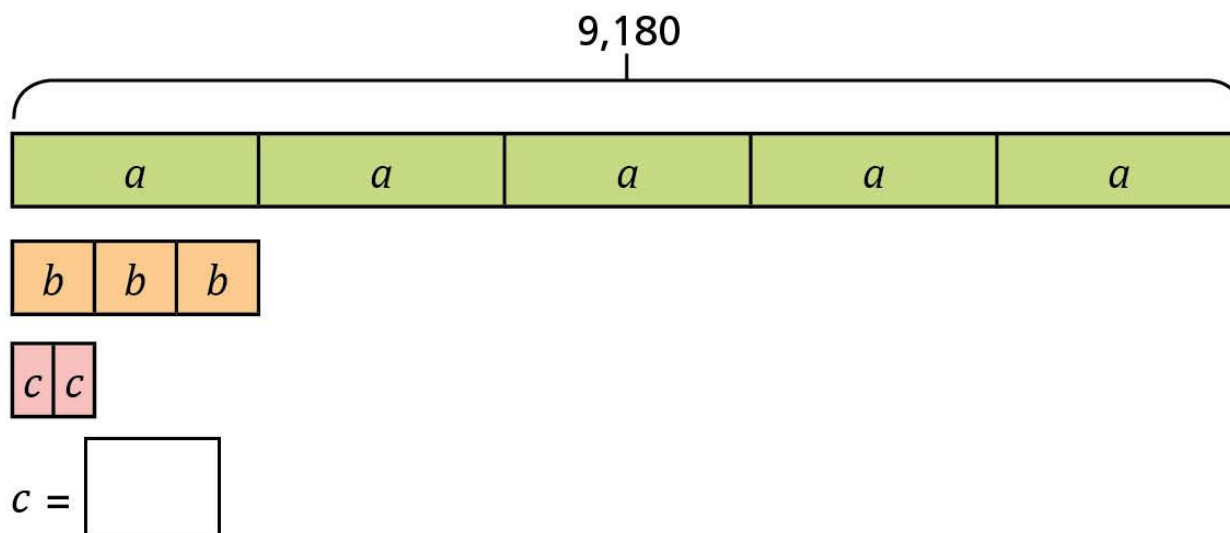
b) How did you work this out? Compare methods with a partner.

8 Eva is thinking of a number.

I multiply it by 6, then multiply the answer by 8, then subtract 500. The result is 9,100

What number did Eva start with?