# Division using factors

**1** Complete the divisions using factors.

**a)**

260 → ÷ 10 → ☐ → ÷ 2 → ☐

260 ÷ 20 = ☐

**b)**

360 → ÷ 10 → ☐ → ÷ 3 → ☐

360 ÷ 30 = ☐

**c)**

240 → ÷ 10 → ☐ → ÷ 6 → ☐

240 ÷ ☐ = ☐

**d)**

480 → ÷ 4 → ☐ → ÷ 6 → ☐

480 ÷ ☐ = ☐

**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.
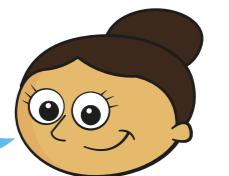
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_____

**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 = ☐

**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 to each calculation? ☐

**7** **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?

Eva started with the number ☐