

# Understand scale factors as multiplicative representations

1 For each pair of similar shapes, write the scale factor from shape A to shape B.

a)

4 cm                      12 cm                      scale factor =

b)

20 cm                      5 cm                      scale factor =

c)

20 cm                      10 cm                      scale factor =

d)

20 cm                      50 cm                      scale factor =

2 A rectangle has a length of 12 cm and a width of 9 cm.  
Work out the length and width of the rectangle if it is enlarged by these scale factors.

a) scale factor 3

length =                       width =

b) scale factor  $\frac{1}{2}$

length =                       width =

c) scale factor 4

length =                       width =

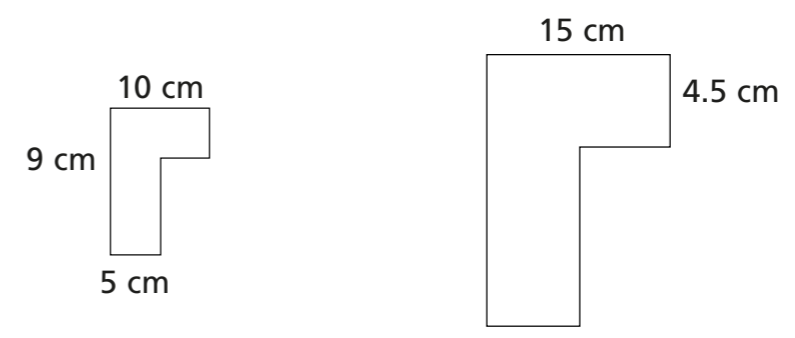
d) scale factor  $\frac{1}{3}$

length =                       width =

e) scale factor  $\frac{2}{3}$

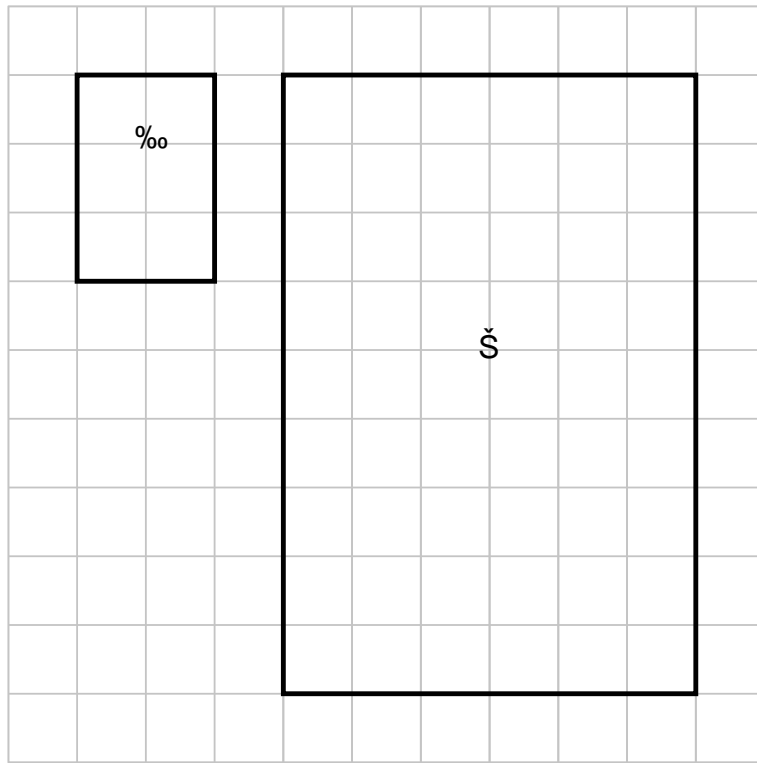
length =                       width =

3 These hexagons are similar.



a) What is the scale factor of enlargement?

b) Work out all the missing lengths. Label them on the diagrams.



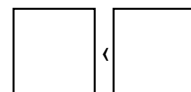
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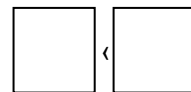
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