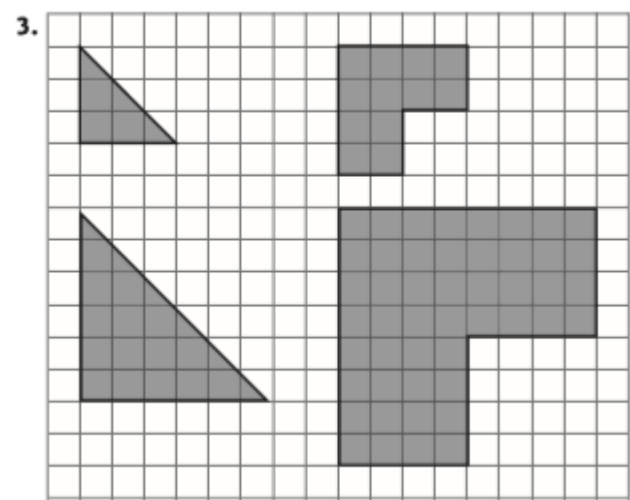


Lesson 6: Scale factors

→ pages 168–170

1. a) $9 \text{ cm} \times 2$
 Mo's line is 2 times longer than Zac's.
 So, the scale factor of enlargement is 2.
 b) $9 \times 5 = 45$
 Olivia's line is 5 times as long as Zac's.
 So, the scale factor of enlargement is 5.
2. Each side of the new shape is twice the length of each side of the old shape.



4.

Rectangle	Original length	Scale factor of enlargement	New length
A	6 cm	4	24 cm
B	12 cm	5	60 cm
C	18 cm	$\frac{1}{2}$	9 cm
D	18 cm	$1\frac{1}{2}$	27 cm
E	5 cm	100	5 m

5. a) The sale factor is $2\frac{1}{2}$.
 b) The sale factor is $\frac{1}{4}$.

Reflect

When a shape is enlarged by a scale factor of $\frac{1}{2}$, each length on the shape is halved (multiplied by $\frac{1}{2}$), so each new side is half the length of the old side.