Varied Fluency
Using Scale Factors

Developing

1a. A rectangle; height 9cm; width 15cm

2a. Yes

3a. A rectangle; height 6 squares; width 4 squares (24 squares in total)

4a. False. It has not been enlarged by a scale factor as the width has been doubled, but the height quadrupled.

Expected

5a. A rectangle; height 8.6cm; width 13cm

6a. Yes

7a. The shape should be reproduced using a scale factor of 3. (45 squares in total)

8a. True

Greater Depth

9a. A rectangle; height 9.75cm; width 12.45cm

10a. No. A scale factor of 1.5 means each side of the original shape is multiplied by 1.5.

11a. The square should be reproduced using a scale factor of 0.5; height 1 square; width 1 square (1 square in total)

12a. False. It has been increased by a scale factor of 1.5.

Varied Fluency
Using Scale Factors

Developing

1b. A square; height 16cm; width 16cm

2b. No. A scale factor of three means each side of the original shape is multiplied by three.

3b. A square; height 6cm; width 6cm (36 squares in total)

4b. True

Expected

5b. A triangle; A: 10.8cm B: 18cm C: 14.4cm

6b. No. All sides are enlarged when using a scale factor.

7b. The shape should be reproduced using a scale factor of 2. (20 squares in total)

8b. False. It has increased by a scale factor of 2.

Greater Depth

9b. A trapezium; A: 7cm B: 8.3cm C: 10.5cm

10b. Yes

11b. The rectangle should be reproduced using a scale factor of 2.5; height: 5 squares; width: 7.5 squares (37.5 squares in total)

12b. True