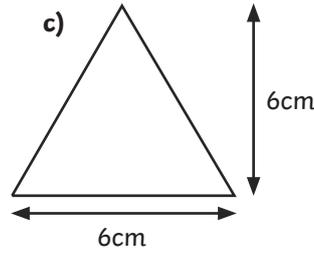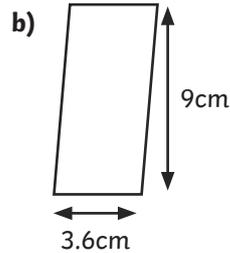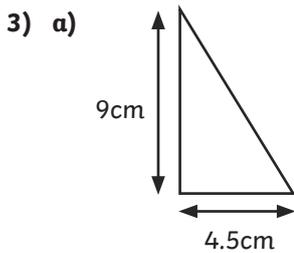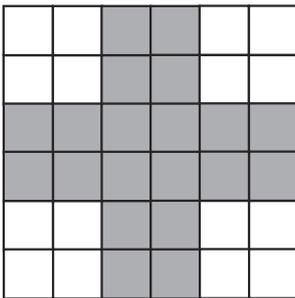**1)** **a)**



Could also be arranged 2 rows of 4 squares.

**b)**
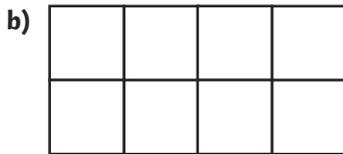


Could also be arranged 4 rows of 2 squares.

**2)** The dimensions of the original flag were 3 × 3 squares.

Doubling these dimensions creates a flag with dimensions of 6 × 6 squares:



**3)** **a)**



9cm

4.5cm

**b)**



9cm

3.6cm

**c)**



6cm

6cm

**4)** 12.9cm ÷ 3 = 4.3cm

4.3cm × 4 = 17.2cm

perimeter = 17.2cm

---

**1)** Alice is incorrect. If shape A is enlarged by a scale factor of 2, then the length and width of the shape double in size.

Correctly enlarging shape a with a scale factor of 2 will result in shape B having a width and height of 4 squares.

**2)** 12 ÷ 3 = 4

4 × 5 = 20cm

**3)** Each dimension should be enlarged by 3.

Width: 3 × 3 = 9cm

Height: 2 × 3 = 6cm

Area of triangle: h × w ÷ 2

9 × 6 = 54 ÷ 2 = 27cm²

Johan is incorrect.

1) 2 + 2 + 2cm = 6cm (even)

 8 + 8 + 8cm = 24cm (even)

 8 ÷ 2 = 4

 **The smaller triangle has been enlarged by a scale factor of four to create the larger triangle. Jamil is correct.**

2) 10 ÷ 4 = 2.5

 **The shape has been enlarged using 2.5 as a scale factor.**

 **3 × 2.5 = 7.5cm**

 **Two sides the same length in an isosceles triangles: 2 × 7.5 = 15cm**

 **15 + 10 = 25cm**

 **The perimeter is 25cm**

3)

| Dimension | Scale Factor 0.5 | Original Triangle | Scale Factor 2 | Scale Factor 3 | Scale Factor 4 |
|---|---|---|---|---|---|
| Height (cm) | **3cm** | **6cm** | **12cm** | **18cm** | 24cm |
| Width (mm) | 16mm | **32mm or 3.2cm** | **64mm or 6.4cm** | **96mm or 9.6cm** | **128mm or 12.8cm** |