Answers Sheet

Similar Shapes

1.

Scale Factor = 16 / 8 = 2
= 14.2 ÷ 2 **= 7.1 cm**

2.

a) Scale Factor = 14 / 10 = 7 / 5
AD = 6 × (7 / 5) = 24 cm
ED = 24 – 6 = 22 cm

b) BE = 8 ÷ (7 / 5)
= 8 × (5 / 7)
= 5.71

3.

a) Scale Factor = 12 / 7
= 6 × (12 / 7)
= 0.97 cm

b) AD = 5.6 × (12 / 7)
= 9.6 cm
9.6 – 5.6 = 4 cm

4.

a) Scale Factor = 14 / 10 = 7 / 5
= 28 × (7 / 5)
= 39.2 cm

b) 45 ÷ (7 / 5)
45 × 5 / 7
32.14 m

5.

a) Scale Factor = 11 / 8
= 10 × (11 / 8)
13.75

b) 14.2 ÷ 11 / 8
14.2 × 8 / 11
= 10.32 cm

6.

a) AC = 4 × 3 = 12cm
Scale factor = 12 / 4 = 3
4 × 3 = 12cm

b) 12 – 4 = 8 cm

7.

Scale Factor for length = 162 / 120 = 81 / 60
Scale Factor for width = 84 / 70 = 42 / 35

The scale factor for length is not equal to the scale factor for width
They are not similar.
