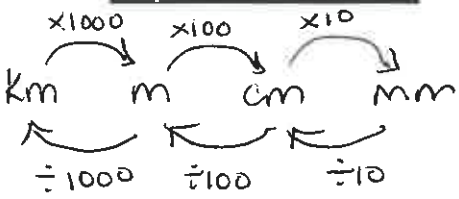
Name: _____ Date: _____

adapted from: BLM 2–8



Chapter 2 Practice Test

For #1 to #4, circle the best answer.

D

1. 473 cm is equivalent to

A 47.3 mm B 47.3 m 473 cm ×10 = 4730mm

C 0.473 km (D) 4.73 m 473cm ÷100 = 4.73m

D

2. On a 25 : 1 scale drawing (dwg : actual), 1 cm on the drawing represents _____ on the object.

A 25 cm B 25 mm 1cm ÷ 25 = 0.04 cm

C 4 mm (D) 0.4 mm ×10 = 0.4mm

A

3. On a 1 : 25 scale drawing (dwg : actual), 1 cm on the drawing represents _____ on the object.

(A) 25 cm B 25 mm 1cm × 25 = 25cm

C 4 mm D 0.4 mm

4. Which statement is true?

D

A In similar triangles, all angles are equal. ✗

B In similar triangles, all sides are equal. ✗

C In similar triangles, corresponding sides are equal. ✗

(D) In similar triangles, corresponding angles are equal. ✓

5. a) In what SI units would you measure the distance from the floor to the bottom of the windows in your classroom? Explain why you chose those units.

cm (or ~~mm~~ m)

→ mm would be too small

→ km " " way too big

→ m are closest to distance we are measuring

b) What personal referent could you use to make the measurement?

height to my hip (≈ 1m)

OR width of outstretched hand (≈ 20cm)

c) Estimate the distance from the floor to the bottom of the windows.

→ hip: just over 1m

→ hand: 5 × hand

5 × 20 ≈ 100cm

Actual height measurement: 103cm

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6. A floor plan of a building is shown. Determine the length of sides A, B, C, and D.
The floor plan is <u>not</u> drawn to scale.

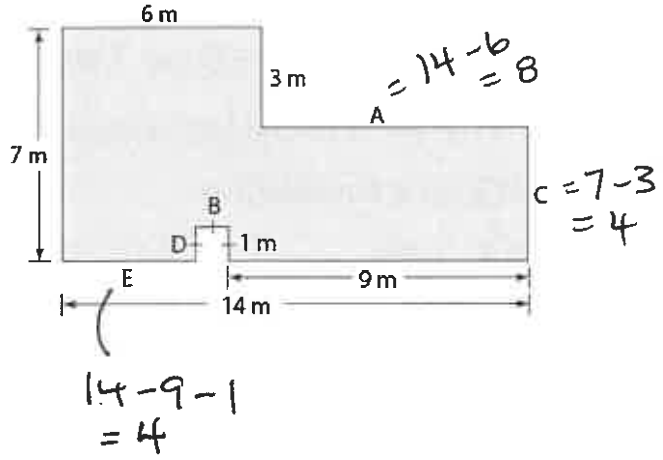
A = 8 m

B = 1m

C = 4m

D = 1m

E = 4m



$= 14 - 6 = 8$

$C = 7 - 3 = 4$

$14 - 9 - 1 = 4$

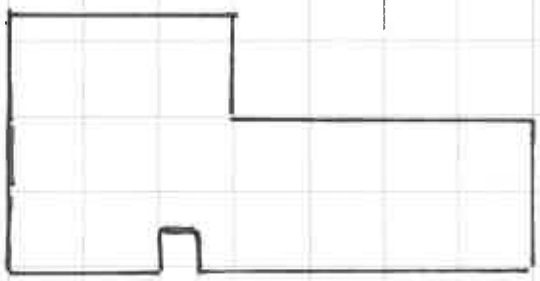
7. Use the cm grid below to create a 1 : 200 scale drawing of the ~~floor plan~~ shown in #6
(the dimensions shown above are the actual dimension).

Draw $\frac{1}{200}$ of size.

$\frac{700}{200} = 3.5cm$ $\quad \frac{300}{200} = 1.5cm$

$\frac{1400}{200} = 7cm$ $\quad \frac{100}{200} = 0.5cm$

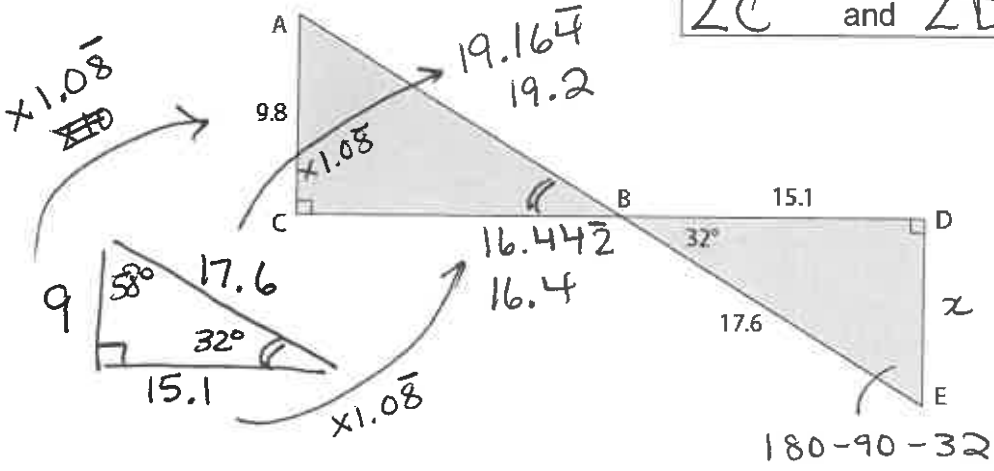
$\frac{600}{200} = 3cm$ $\quad \frac{900}{200} = 4.5cm$



1:200

8. a) List the corresponding sides and the corresponding angles in the diagram below.

Corresponding Angles		Corresponding Sides	
∠A	and ∠E	AB	and EB
∠ABC	and ∠EBD	AC	and ED
∠C	and ∠D	CB	and DB



need Pythagoras.

$x^2 + 15.1^2 = 17.6^2$

$x^2 = 81.75$

$x = \sqrt{81.75}$

$x = 9.0415\ldots$

$x = 9.0$

$180 - 90 - 32 = 58°$

b) Determine all unknown side measurements to the nearest tenth and determine all unknown angles.

side AB = 19.2

side BC = 16.4.

side DE = 9.0

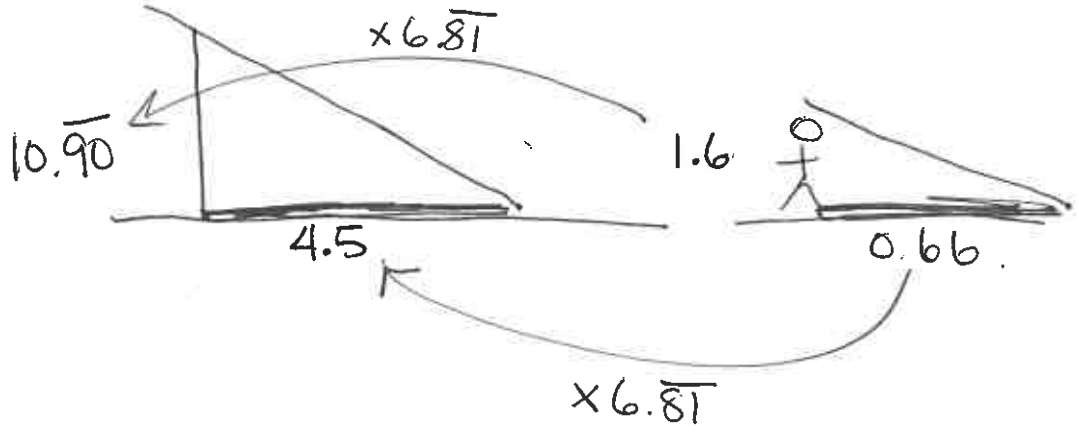
angle A = 58°

angle E = 58°

angle ABC = 32°

9. A telephone pole casts a 4.5 m shadow. At the same time, Sarah, who stands 1.6 m tall casts a shadow measuring 66 cm. To the nearest metre, how tall is the telephone pole? (Hint: Draw a diagram to show the situation AND convert all measurements to the same units).

$66 \div 100 = 0.66$

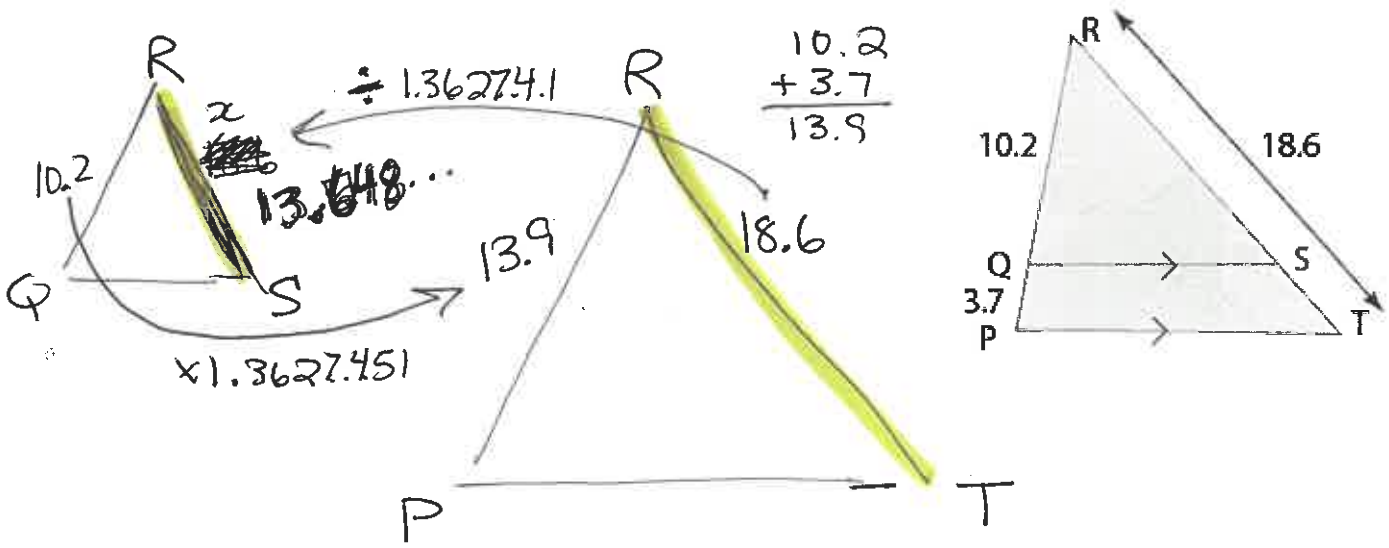


10.9

or

11m

10. QS is parallel to PT. Determine the length of RS to the nearest tenth.



$$\frac{13.9}{10.2} = \frac{18.6}{x}$$

$$x = \frac{10.2 \times 18.6}{13.9}$$

$$= 13.6489...$$

$$= \boxed{13.6}$$