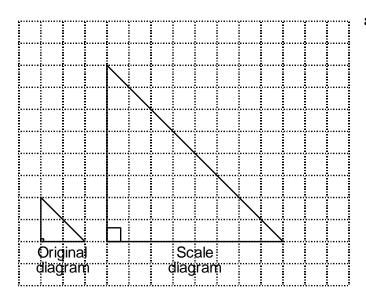
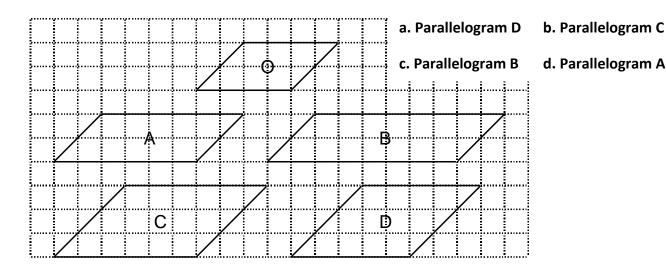
Multiple Choice: Identify the choice that best completes the statement or answers the question

1. Determine the scale factor for this scale diagram.



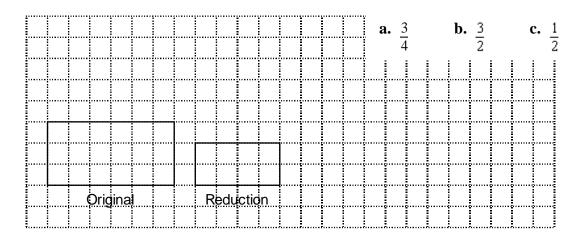
- a. 32 b. 8
- c. 4
- **d.**  $\frac{1}{4}$

2. Which of parallelograms A, B, C, and D are scale diagrams of parallelogram O?



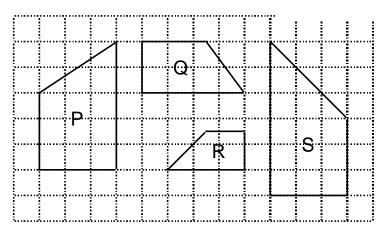
- 3. A square has side length 13.6 cm. The side length of the reduction is 3.4 cm. Determine the scale factor.
  - **a.**  $\frac{5}{51}$
- **b.**  $\frac{51}{5}$
- **c.**  $\frac{1}{4}$
- **d.** 4

4. Determine the scale factor for this reduction.



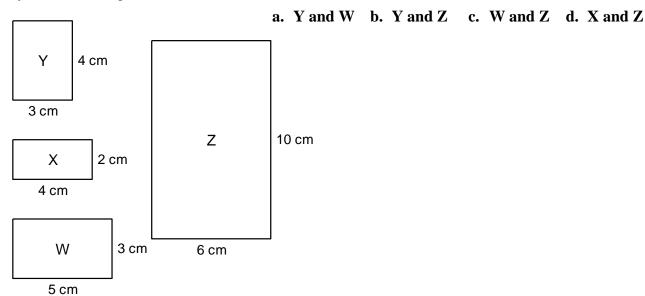
- \_\_\_ 5. Which two polygons have pairs of corresponding lengths that are proportional?
  - a. R and S b. P and S c. Q and R d. P and Q

**d.**  $\frac{2}{3}$ 



- \_\_\_\_ 6. A soccer pitch is about 110 m (1 m = 100 cm) long. A model of the soccer pitch is made using a scale of 1:70. Determine the length of the model to the nearest centimetre.
- a. 1571 cm
- b. 2 cm
- c. 16 cm
- d. 157 cm
- 7. Calculate the value of y in this proportion:  $\frac{y}{7.2} = \frac{6}{12}$ 
  - a. 3.6
- b. 1.1
- c. 31.2
- d. 1.2

8. Identify similar rectangles.

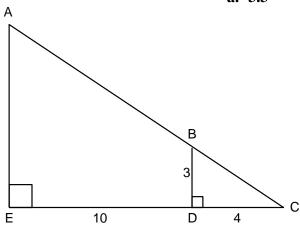


9. Determine the length of AE in this pair of similar triangles.

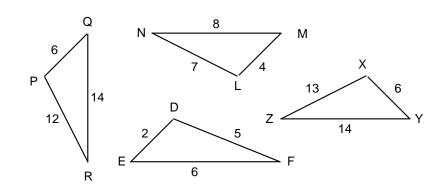


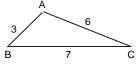
c. 7.5

d. 4.3



\_\_\_\_13. Which triangle is similar to ΔABC?





a.  $\Delta XYZ$ 

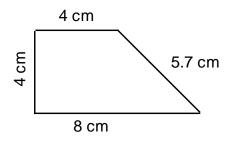
 $\text{b}\,\Delta LMN$ 

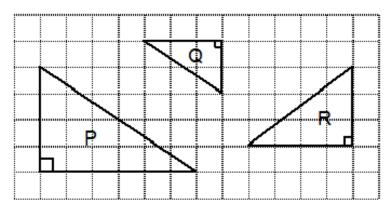
 $\textbf{c.} \, \Delta \textbf{DEF}$ 

 $\text{d.}\,\Delta PQR$ 

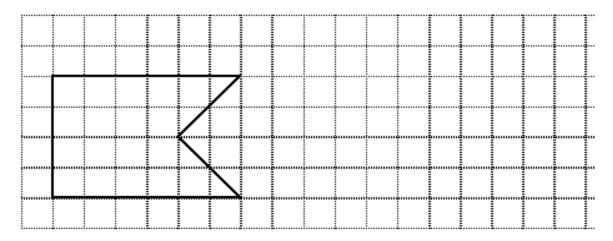
## **Short Answer:** Show all work in the space provided to receive full marks!

- 14. An enlargement of the shape below is made using a scale 15. Which two triangles have pairs of corresponding lengths factor of 2. Determine the side lengths of the enlargement.
  - that are proportional? Identify the scale factor for the reduction.

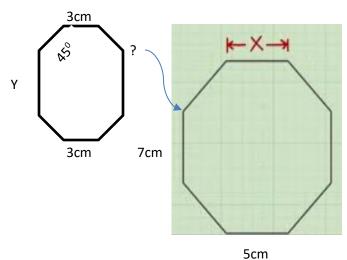




17. Draw a reduction of this pentagon using a scale factor of 0.75



18. The octagons to the right are similar. Determine the unknown angle and the side lengths x & y:



## Unit test Review: Similarities and Transformations TASK 1 & 2-2014 MULTIPLE CHOICE

**Answer Section** 

- 1. ANS: C
- 2. ANS: B
- 3. ANS: C
- 4. ANS: D
- 5. ANS: A
- 6. ANS: D
- 7. ANS: A
- 8. ANS: C
- 9. ANS: B
- 10. ANS:
- 11. ANS:
- 11. 111.6.
- 12. ANS:
- 13. ANS: D

## **SHORT ANSWER**

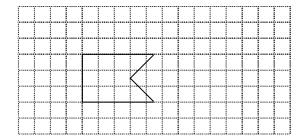
14. ANS:

8 cm, 8 cm, 11.4 cm, and 16 cm

15. ANS:

Triangle Q is a reduction of triangle P; the scale factor for the reduction is  $\frac{1}{2}$ .

- 16. ANS:
- 17. ANS:



18. ANS:

 $? = 45^{\circ} X = 5 \text{cm & } Y = 4.2 \text{ cm}$