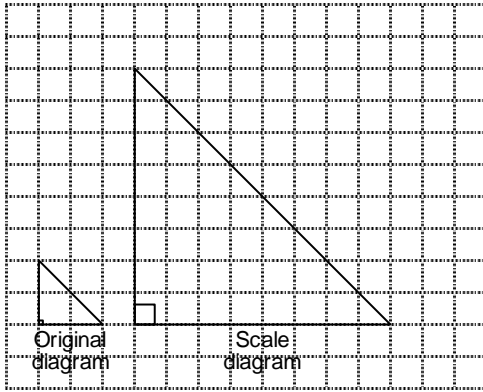


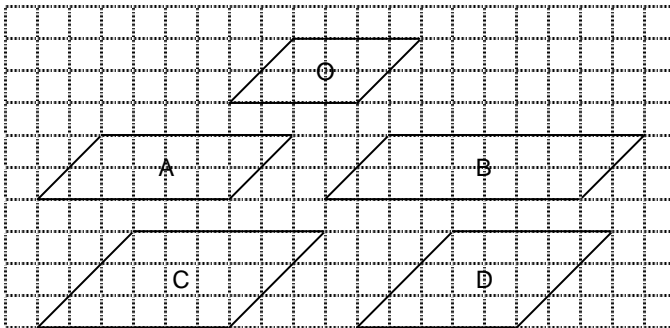
Multiple Choice: Identify the choice that best completes the statement or answers the question

_____ 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?

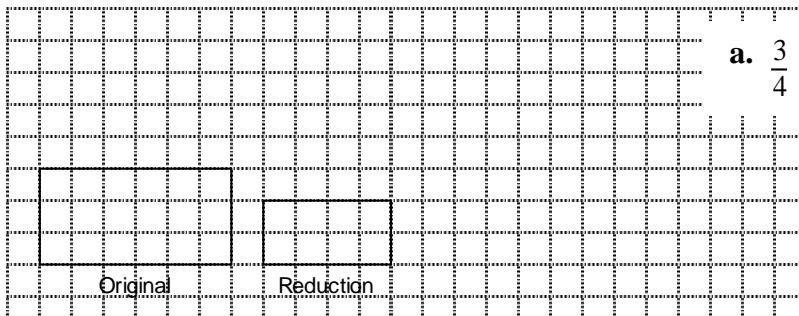


- a. Parallelogram D b. Parallelogram C
c. Parallelogram B d. Parallelogram A

_____ 3. A square has side length 13.6 cm. The side length of the reduction is 3.4 cm. Determine the scale factor.

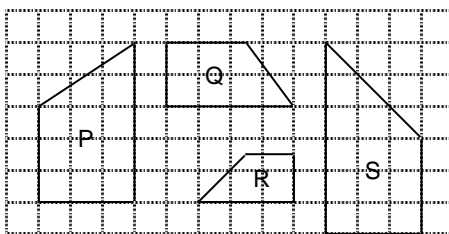
- a. $\frac{5}{51}$ b. $\frac{51}{5}$ c. $\frac{1}{4}$ d. 4

_____ 4. Determine the scale factor for this reduction.



- a. $\frac{3}{4}$ b. $\frac{3}{2}$ c. $\frac{1}{2}$ d. $\frac{2}{3}$

_____ 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

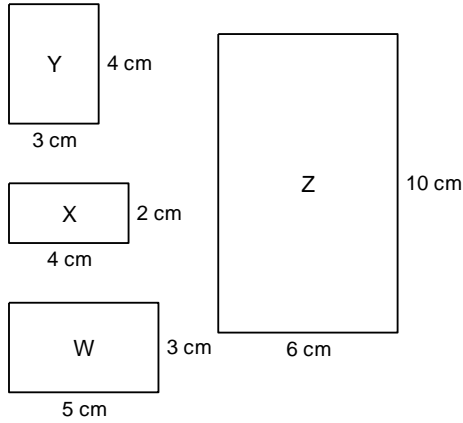
___ 6. A soccer pitch is about 110 m long. A model of the soccer pitch is made using a scale of 1:70. Determine the length of the model to the nearest centimetre, if necessary.

- a. 1571 cm b. 2 cm c. 16 cm d. 157 cm

___ 7. Calculate the value of y in this proportion: $\frac{y}{7.2} = \frac{6}{12}$

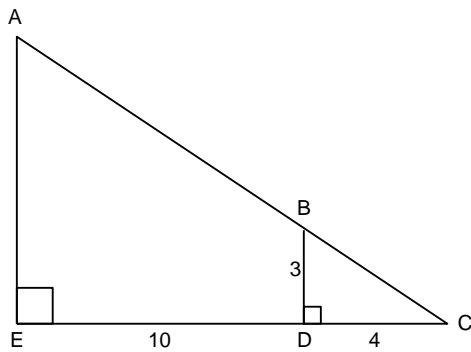
- a. 3.6 b. 1.1 c. 31.2 d. 1.2

___ 8. Identify similar rectangles.



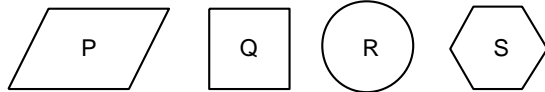
- a. Y and W b. Y and Z c. W and Z d. X and Z

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



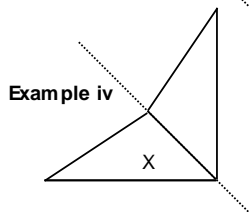
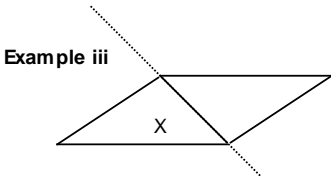
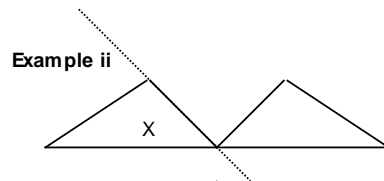
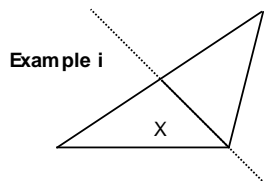
- a. 3.3 b. 10.5 c. 7.5 d. 4.3

___ 10. Which shapes have at least 2 lines of symmetry?



- a. Shapes P, Q, S c. Shapes Q, R, S
b. Shapes P, S d. Shapes P, Q, R, S

___ 11. Which examples show a reflection of triangle X in the dotted line?



- a. Example iii
b. Example i
c. Example ii
d. Example iv

12. What is the angle of rotation symmetry for a shape that has rotational symmetry of order 5?

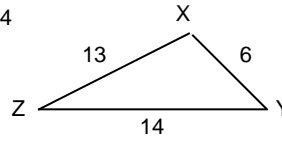
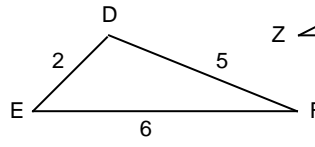
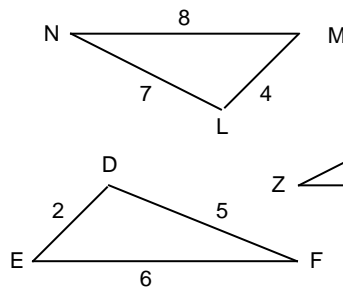
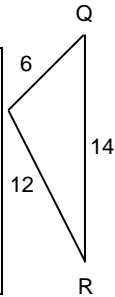
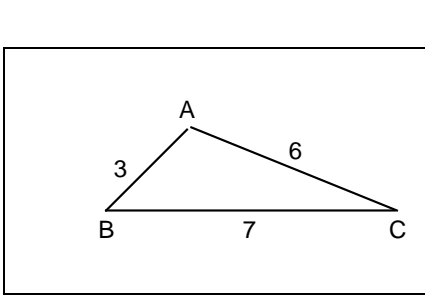
a. 144°

b. 36°

c. 72°

d. 75°

13. Which triangle is similar to $\triangle ABC$?



a. $\triangle XYZ$

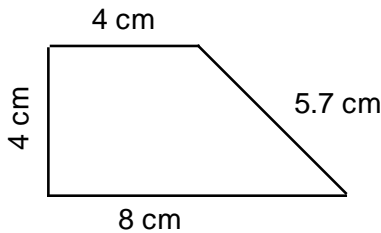
b. $\triangle LMN$

c. $\triangle DEF$

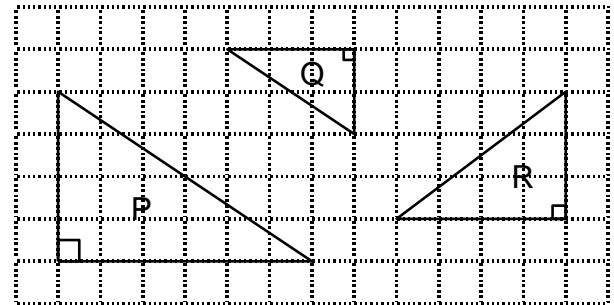
d. $\triangle PQR$

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

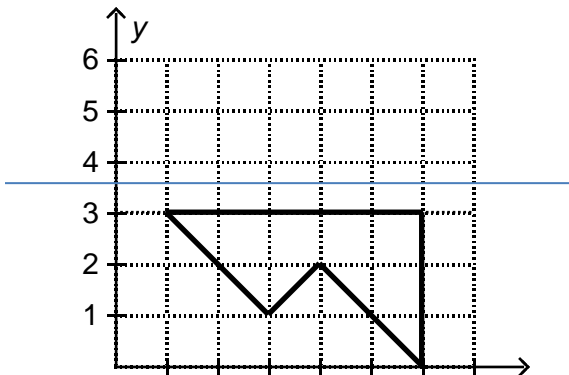
14. An enlargement of the shape below is made using a scale factor of 2. Determine the side lengths of the enlargement.



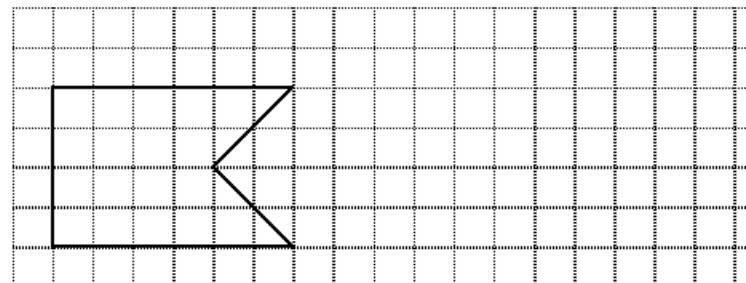
15. Which two triangles have pairs of corresponding lengths that are proportional? Identify the scale factor for the reduction.



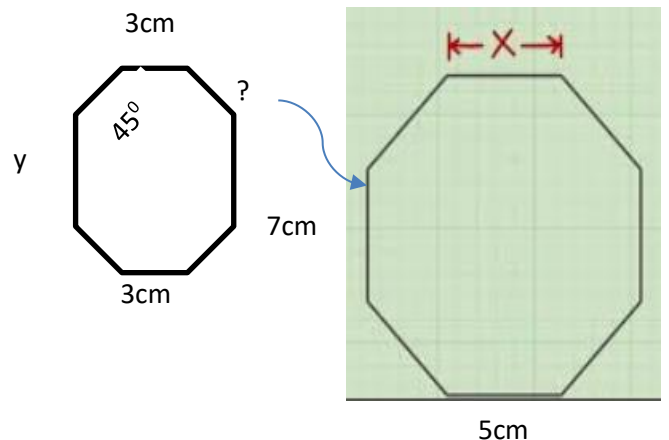
16. This polygon is one-half of a shape. Use the dotted line as a line of symmetry to complete the shape by drawing its other half.



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

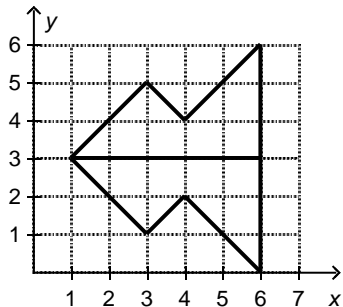
1. ANS: C
2. ANS: B
3. ANS: C
4. ANS: D
5. ANS: A
6. ANS: D
7. ANS: A
8. ANS: C
9. ANS: B
10. ANS: C
11. ANS: D
12. ANS: C
13. ANS: D

SHORT ANSWER

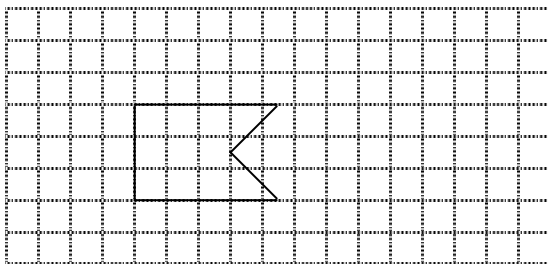
14. ANS:
8 cm, 8 cm, 11.4 cm, and 16 cm

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° X = 5cm & Y = 4.2 cm