Similarity Ch 8 Review for Test 8

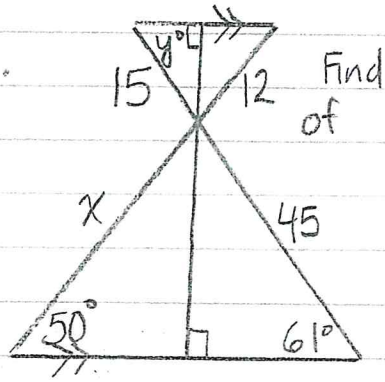
1. GRAPH $\triangle ABC$ and its image after a dilation of 75%.
A(-8, 2) B(0,4) C(-2,-4)

2. Graph $\triangle ABC$ and its image after the similarity transformation:
• dilation with $k = 2$ A(-4,0) C(1,-2)
• reflection in y-axis B(0,2)

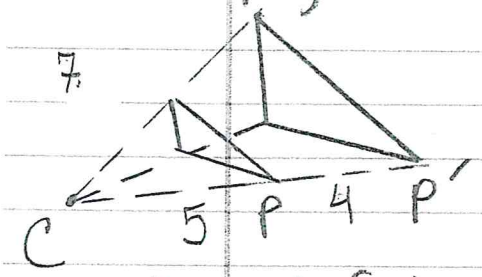
3. Two polygons are similar. If the larger perimeter is 48un and the side ratio is 3/4 find the smaller perimeter.

4. The ratio of two corresponding sides in two similar pentagons is 5/2. The smaller area is $40 un^2$. Find the other area.

5. A magnifying glass creates an image 12x larger than the actual size. Through the glass you see an ant 78mm long. What is the actual length?

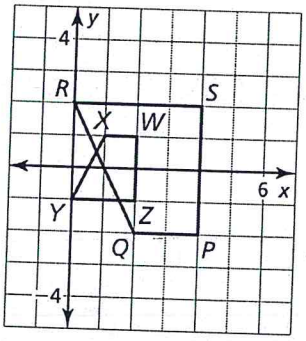
6. 

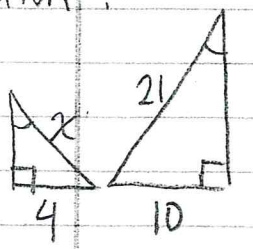
Find the values of x and y

7. 

Find the scale factor K
Is this an enlargement or reduction?

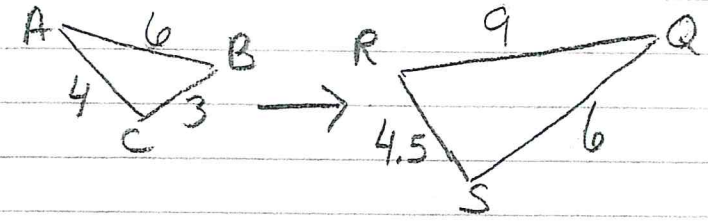
8. Describe a similarity transformation th maps trapezoid *WXYZ* to trapezoid *PQ*



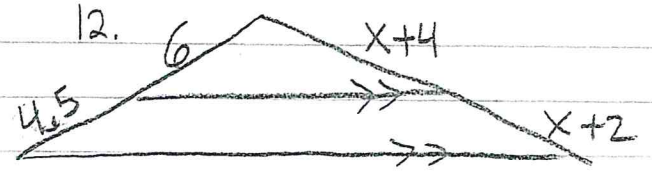
9. 

Find the value of x

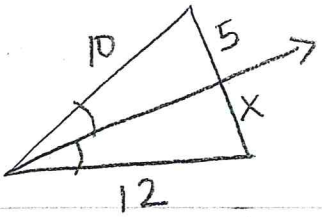
10. Find the scale factor $\triangle ABC \sim \triangle QRS$



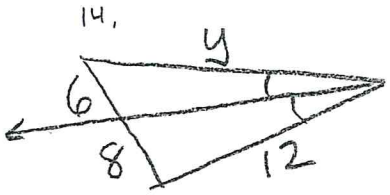
11. Using the $\triangle$'s in problem 10, $m\angle Q = 25°$, $m\angle C = 100$
Find $m\angle B$.

12. 

Find the value of x

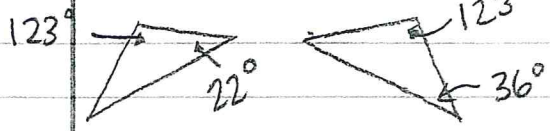
13. 

Find the value of x

14. 

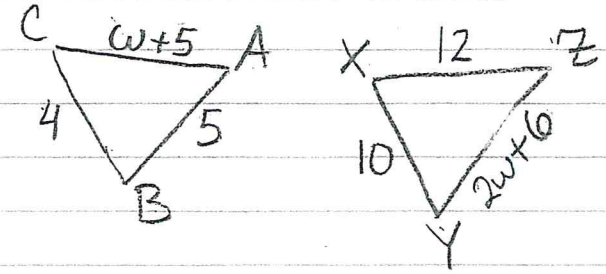
Find the value of y

15. Are these △s ~ ?

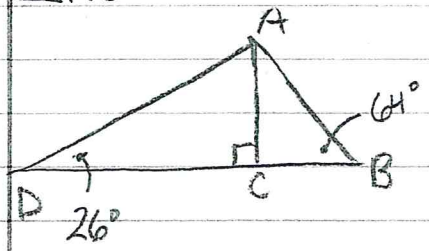


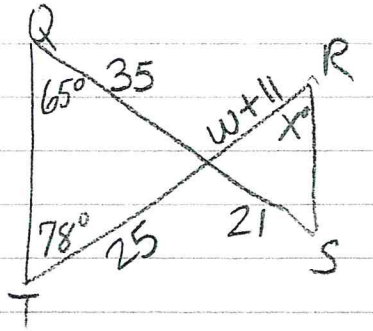
Justify your answer.

16. △XYZ ~ △ABC
Find the value of w



17. Determine whether
△ABC ~ △DAC



18. 

$\overline{QT} \parallel \overline{RS}$
Find the values of x and w

19. Factor the polynomials

a) $x^2 - 2x - 15$
b) $x^2 + 2x - 24$
c) $x^2 - 7x + 12$

20. Solve the quadratic equations

a) $x^2 - 5x - 6 = 0$
b) $x^2 + 2x - 15 = 0$
c) $x^2 - 5x = 0$