Name _____

Period _____

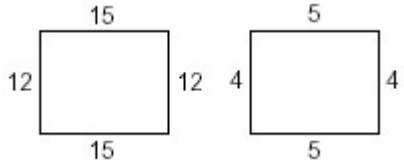
Geometry – Mod 11 Review

1. Solve for x: $\frac{3}{4} = \frac{x}{24}$

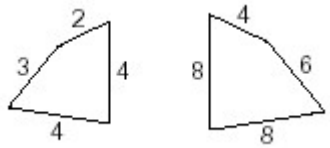
(A) 32 (B) 18
(C) 12 (D) 6

2. Which pair of polygons is definitely *not* similar?

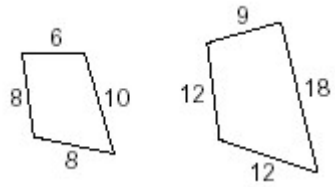
A.



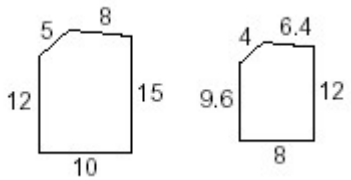
B.



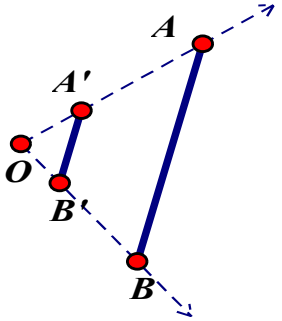
C.



D.



3. In the figure below, OB' = 3 and BB' = 6. Find the scale factor of the dilation.



(A) 2
(B) $\frac{1}{2}$
(C) 3
(D) $\frac{1}{3}$

4. If $\Delta ABC \sim \Delta LMN$, $AB = 18$, $BC = 12$, $LN = 9$, and $LM = 6$, find the scale factor of ΔABC to ΔLMN.

(A) 9:2 (B) 3:1
(C) 3:2 (D) 2:1

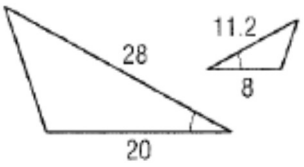
5. If $\Delta ABR \sim \Delta LGW$, complete the following proportions.

a) $\frac{AB}{LG} = \frac{AR}{[\quad]}$

b) $\frac{AB}{BR} = \frac{[\quad]}{[\quad]}$

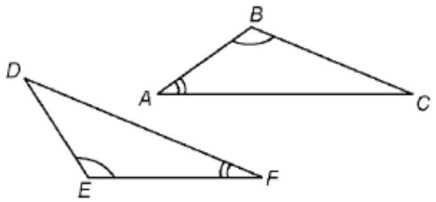
c) $\frac{LW}{[\quad]} = \frac{[\quad]}{AB}$

6. Name the property that can be used to prove that these triangles are similar.



(A) AA Similarity (B) SSS Similarity
(C) SSA Similarity (D) SAS Similarity

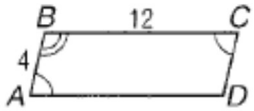
7. Determine if the triangles below are similar.

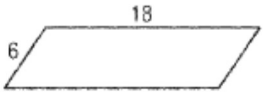


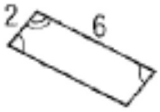
(A) yes, $\Delta EDF \sim \Delta BCA$ by AA Similarity
(B) yes, $\Delta EDF \sim \Delta ABC$ by AA Similarity
(C) yes, $\Delta EDF \sim \Delta BCA$ by ASA Similarity
(D) Not enough info to determine similarity

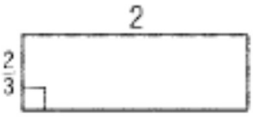
Geometry – Mod 11 Review

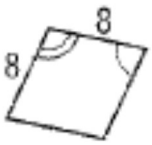
8. Find the polygon that is similar to $ABCD$.



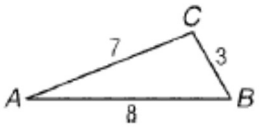
(A) 

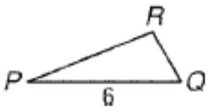
(B) 

(C) 

(D) 

9. If $\Delta ABC \sim \Delta PQR$, find the perimeter of ΔPQR.

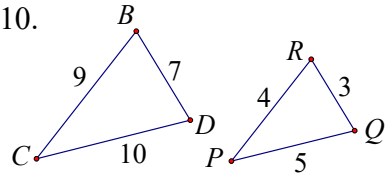




(A) 12 (B) 14.5
(C) 13.5 (D) 16

For Problems 10-12, determine if the triangles are similar. If they are similar, state the property that proves similarity and write a similarity statement.

10.

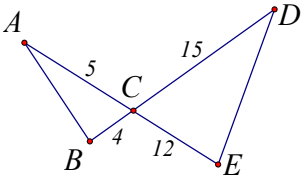


Similar: yes or no

If similar
Property _____

$\Delta BCD \sim \Delta$ _____

11.

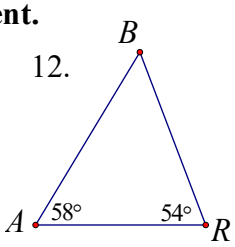


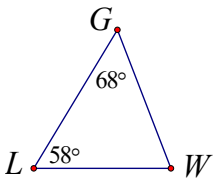
Similar: yes or no

If similar
Property _____

$\Delta ABC \sim \Delta$ _____

12.





Similar: yes or no

If similar
Property _____

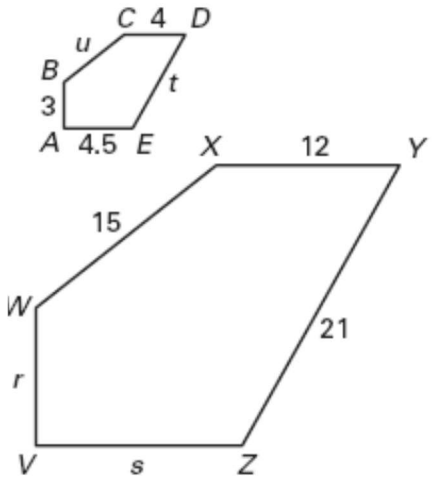
$\Delta ABR \sim \Delta$ _____

For Problems 13-15, use the diagram at right, in which $ABCDE \sim VWXYZ$

13. Find the scale factor of $VWXYZ$ to $ABCDE$.

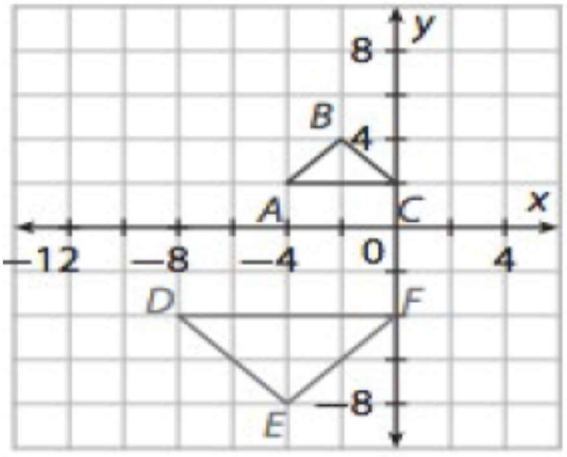
14. If $m\angle B = 132°$, find $m\angle W$.

15. Find the values of r, s, t, and u.



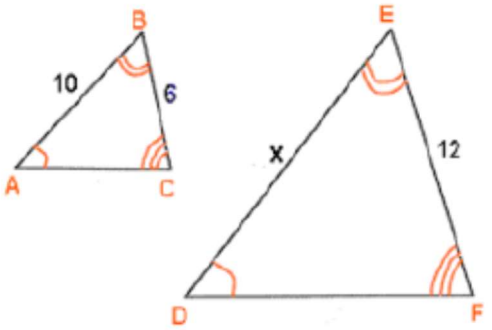
Geometry – Mod 11 Review

16. Describe, in words, the sequence of similarity transformations that map ΔABC to ΔDEF. Then write in coordinate notation for the transformations.

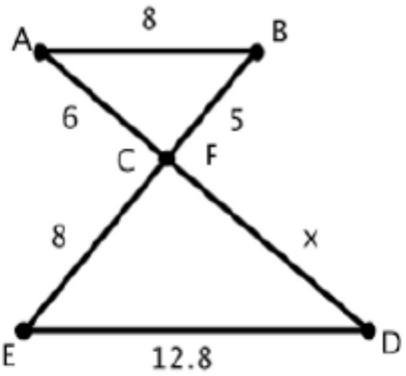


For Problems 17-18, solve for x.

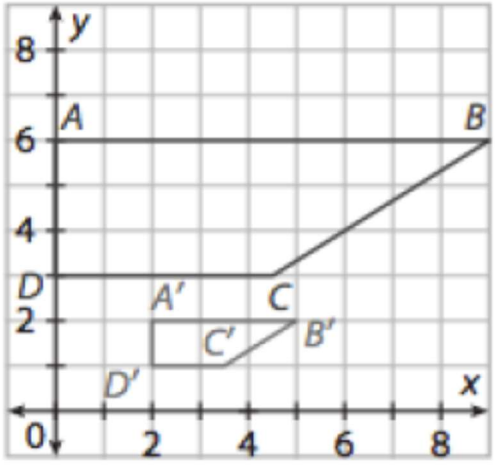
17.



18. $\Delta ABC \sim \Delta DEC$



19. Find the scale factor and the coordinates of the center of dilation.



20. Would the following transformations result in similar figures?

	Yes	No
$(x, y) \rightarrow (2x, 2y)$		
$(x, y) \rightarrow (x + 4, 2y)$		
$(x, y) \rightarrow (2x, \frac{2}{3}y)$		
$(x, y) \rightarrow (\frac{2}{3}x, \frac{2}{3}y)$		