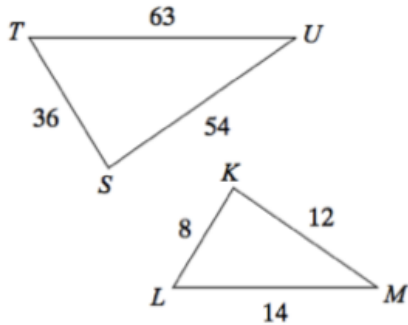


Directions: Determine if the polygons are similar.
 If they are, determine the linear scale factor and write a similarity statement.

1)

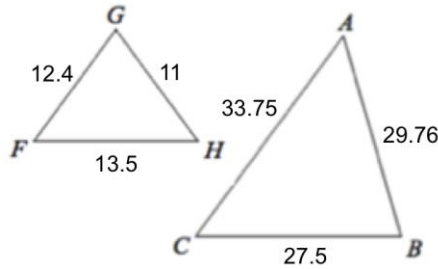


Similar? YES or NO

Linear Scale Factor: _____

Similarity Statement:

2)

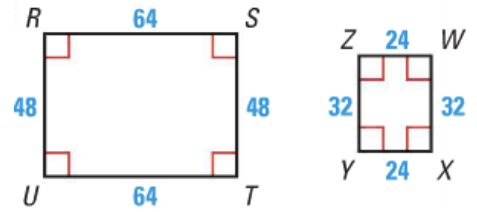


Similar? YES or NO

Linear Scale Factor: _____

Similarity Statement:

3)



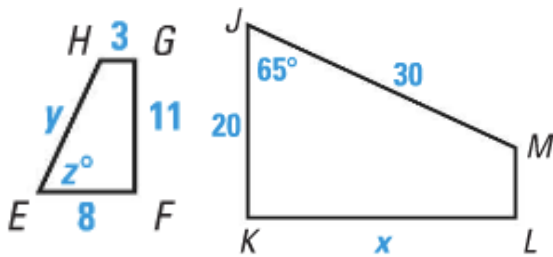
Similar? YES or NO

Linear Scale Factor: _____

Similarity Statement: _____

Directions: In the diagram, $JKLM \sim EFGH$.

4)

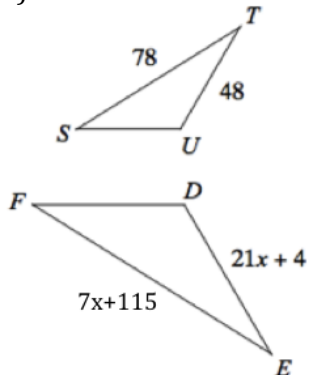


a) Find the scale factor of $JKLM$ to $EFGH$.

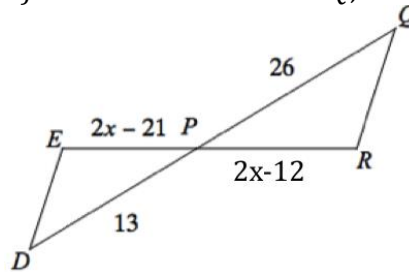
b) Find the values of x , y , and z .

$x =$ _____ $y =$ _____ $z =$ _____

5) Given that $\Delta STU \sim \Delta FED$, find DE .



6) Given that $\Delta PED \sim \Delta PRQ$, find EP .



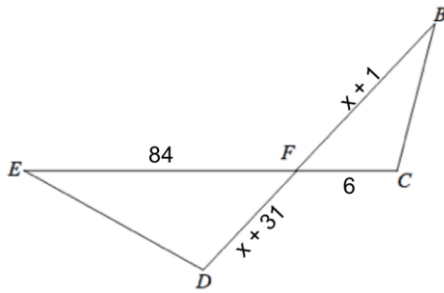
7) Which of the following triangle measurements represents a similar triangle to one with measurements of 32, 11, and 15 inches?

- (a) 10.66 in, 3.66 in, and 1.66 in
- (b) 8 in, 2.75 in, and 5 in
- (c) 16 in, 5.5 in, and 7.5 in
- (d) 64 in, 22 in, and 30 in
- (e) 96 in, 22 in, and 15 in

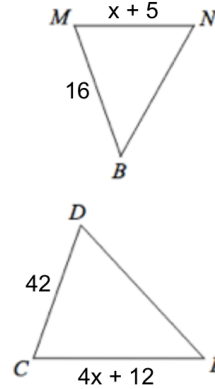
8) Which of the following triangle measurements represents a similar triangle to one with measurements of 25, 33, and 42 feet?

- (a) 10ft, 13.2ft, and 16.8ft
- (b) 12.5 ft, 1.5ft, and 10.5ft
- (c) 75 ft, 99ft, and 126ft
- (d) 100 ft, 132ft, and 168ft
- (e) 50 ft, 66ft, and 84ft

9) Solve for x given that $FDE \sim FCB$

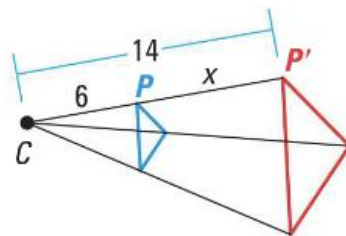


10) Solve for x given that $NMB \sim DCB$

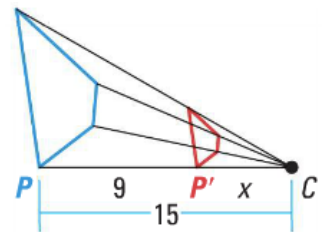


11) The lengths of the sides of a triangle have the ratio 2:6:7. If the perimeter of the triangle is 52.5 yards, what is the length of the smallest side?

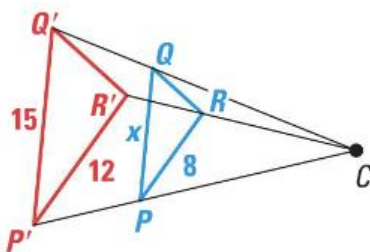
12.
Linear scale factor:
Type:



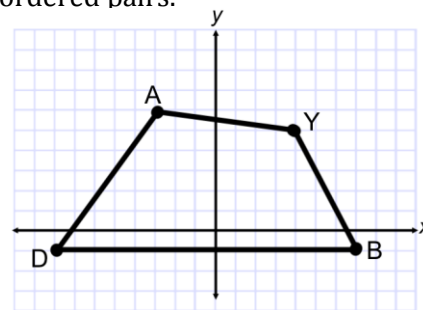
13.
Linear scale factor:
Type:



14. Calculate the linear scale factor. Find the value of x that makes $\Delta Q'R'P' \sim \Delta QRP$. Then, describe the dilation.



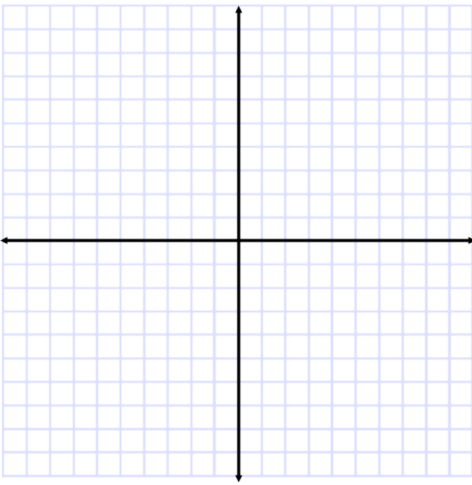
15. Dilate the quadrilateral AYBD by a linear scale factor of 0.5 centered at the origin. Find the coordinates of the image of A' , Y' , B' , D' to calculate the sum of all of the ordered pairs.



A'
 Y'
 B'
 D'
Sum:

Directions: For exercises 16 and 17: Given the vertices of a triangle and the linear scale factor, find the vertices of the dilated image. Graph the image on the coordinate plane using proper notation. Finally, find the product or sum all of the y-coordinates of the image.

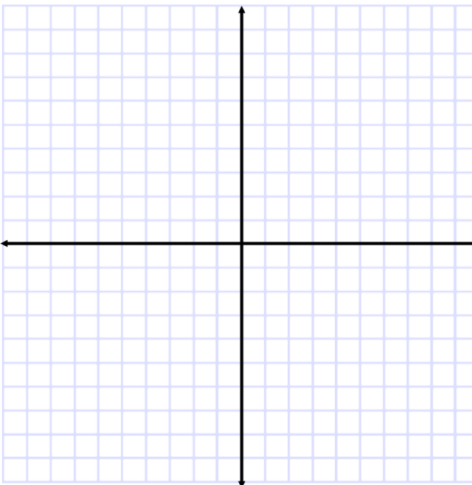
16. $A(0, 3)$, $B(2, -3)$, $C(4, 4)$ with a linear scale factor of 2 and center of dilation at $(-2, -2)$



Coordinates of $\Delta A'B'C'$

Product:

17. $A(-3, 5)$, $B(9, 8)$, $C(0, -10)$ with a linear scale factor of $\frac{1}{3}$ and center of dilation at $(3, 2)$

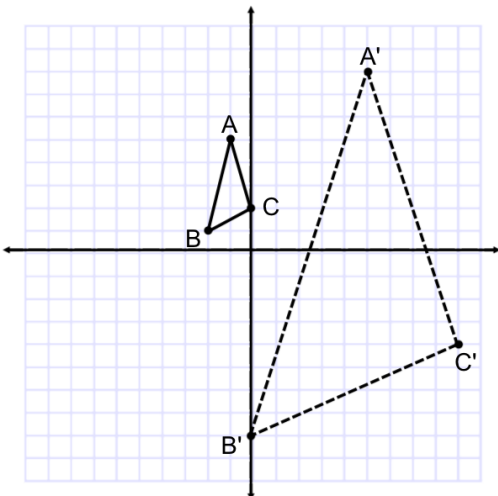


Coordinates of $\Delta A'B'C'$

Sum:

Directions: Write the rule for the following dilations. Make sure to include the scale factor and the center of dilation.

18.



19.

