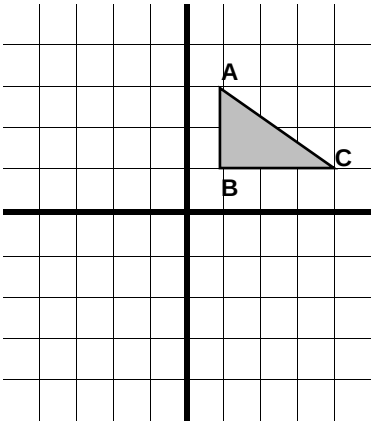
CORE CONNECTION (math 8) **Name:**

Chp. 6 Review for Test **Per.** **Date:**

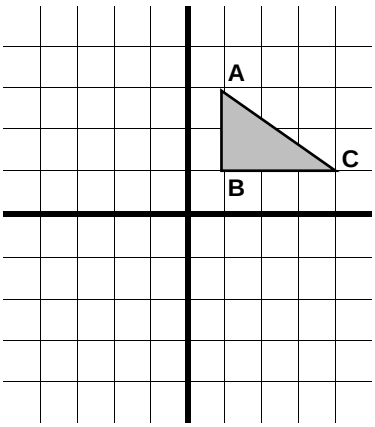
1. Following the direction and draw the triangle in the new position and give the new coordinates of each vertices.

a) **Translate** 3 left, 5 down



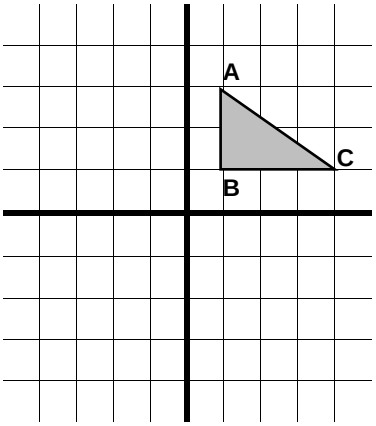
New coordinates:
A'( ), B'( ), C'( )

b) **Rotate** 90^o cw about (1,1)



New coordinates:
A'( ), B'( ), C'( )

c) **Reflect** across the y-axis



New coordinates:
A'( ), B'( ), C'( )

2. Write the definition for…

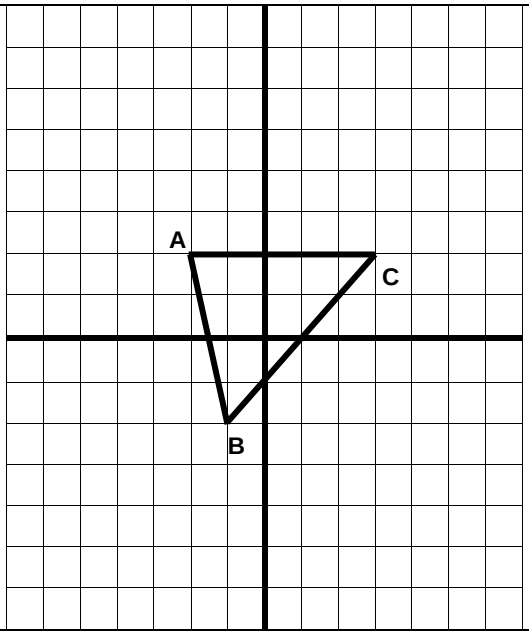
SIMILAR:

CONGRUENT:

3. Janet is dilating the triangle ABC at right. She multiplied each x- and y-coordinate by 2.

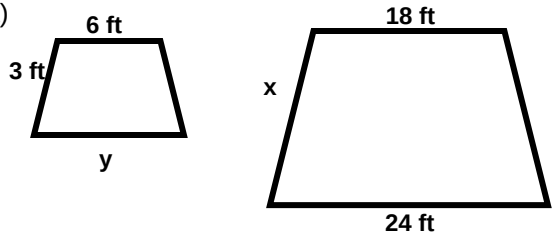
a)Graph Janet's new triangle.

b) Describe how the triangle ABC changed.



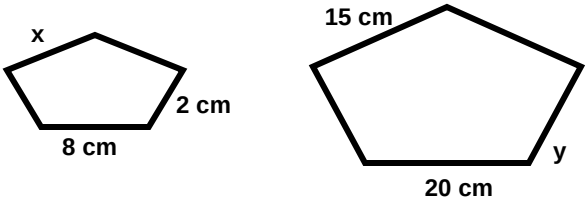
4. The shapes below are similar. Find x and y for each.

a)



x= y=

b)



x= y=

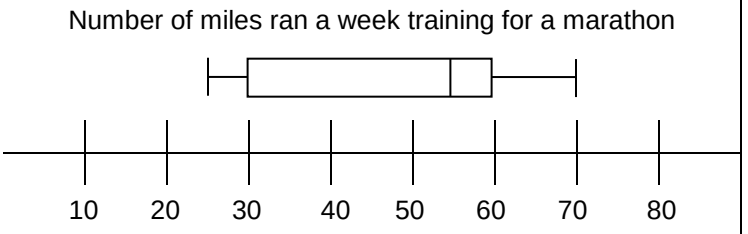
5. Answer the following.

a) What is the MEDIAN?____

b) Based on the plot, what percent of runners run more than 30 miles a week? _____

c) Based on the plot, what percent of runners run more than 60 miles a week? _____

d) What is the highest number of miles any one runs a week?_____



6. Solve the following.

a) $.75x = 15$

b) $\frac{5}{4}x = 30$

7. Solve the following.

a) $4 - 3(2x - 4) = -2$

b) $\frac{5}{x+2} = \frac{3}{4}$

8. Evaluate the expressions below when $x = 9$ and $y = {}^{-}4$

a) $\sqrt{x} + y^2$

b) $4(x+y)^2$

9. Solve the system of equations for **(x, y)** and graph the equations.

$y = -x + 9$ $\quad$ $y = 2x - 3$