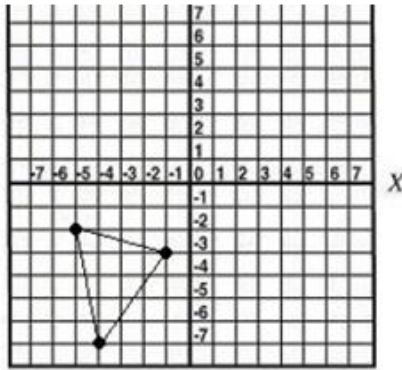


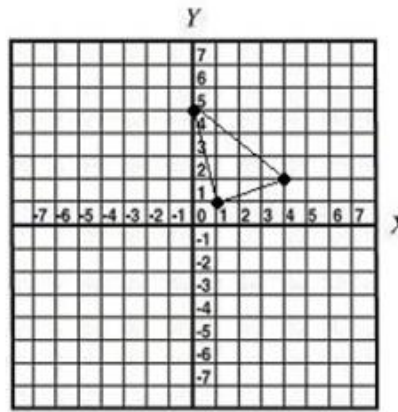
Unit 1-Review

For problems 1-4, a) write the coordinates of the pre-image points, b) draw the transformation, c) write the coordinates of the image points, and d) write the rule $(x, y \rightarrow ???, ???)$ associated with the transformation

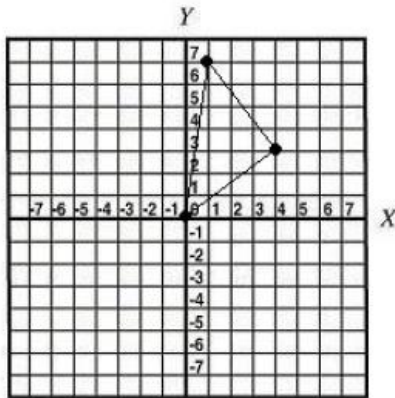
1. Rotate 180° counterclockwise around the origin



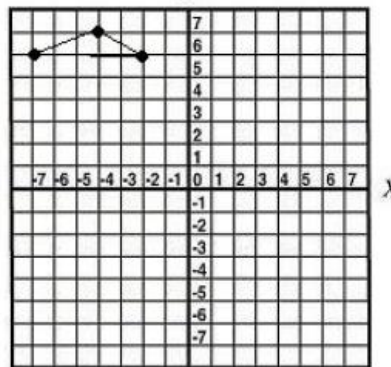
2. Reflect over x axis.



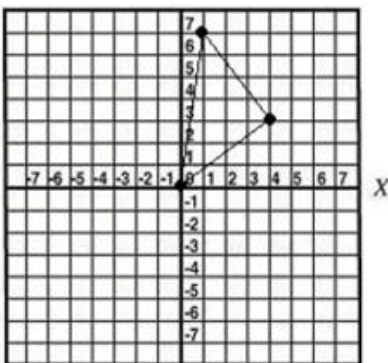
3. Reflect over y axis.



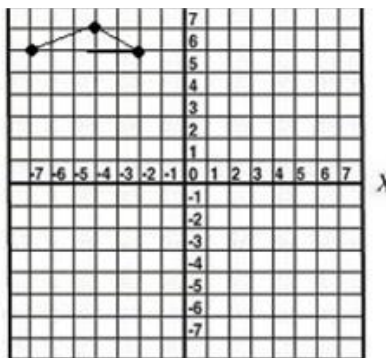
4. Rotate 90° counterclockwise around the origin



5. Draw the IMAGE according to the transformation: $(x, y) \rightarrow (x - 5, y - 4)$

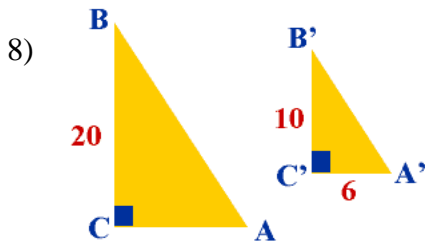


6. Draw the PRE-IMAGE of the figure given that transformation was $(x, y) \rightarrow (x - 3, y + 6)$



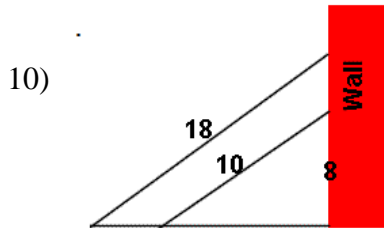
7) Two figures/polygons are similar if the following two criteria are met:

- Congruent _____
- Proportional _____



Given angle A and angle A' are each 59° , find AC .

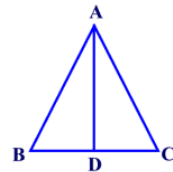
9) Two triangles are similar. The sides of the first triangle are 7, 9, and 11. The smallest side of the second triangle is 21. Find the **perimeter** of the second triangle.



Two ladders are leaned against a wall such that they make the same angle with the ground. The 10' ladder reaches 8' up the wall. How much further up the wall does the 18' ladder reach?

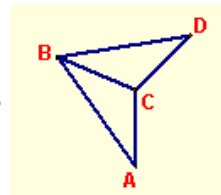
11) In the figure to the right, $\overline{AB} \cong \overline{AC}$, and D is the midpoint of segment BC .

Is $\triangle ADB \cong \triangle ADC$? If so, which congruence postulate states that they are congruent?



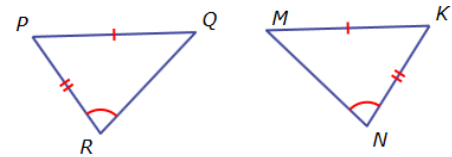
12) In the figure to the right, $\angle A \cong \angle D$, $\angle BCD \cong \angle BCA$.

Which congruence postulate states that they are congruent? Write the congruence statement ($\triangle ??? \cong \triangle ???$)

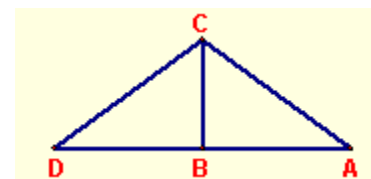


13) In the figure to the right, is $\triangle PQR \cong \triangle KMN$?

If so, which congruence postulate states that they are congruent?



14) In the figure to the right, $\angle CBD$ and $\angle CBA$ are right angles, and $CD \cong CA$. Is $\triangle CBD \cong \triangle CBA$? If so, which congruence postulate states that they are congruent?



15) a) $\triangle ABC$ (below) is isosceles. Find the length of "a" and the measure of $\angle C$.

b) If $\overline{DE} = 3x - 4$ and is the mid-segment of $\triangle ABC$, find DE and EC .

