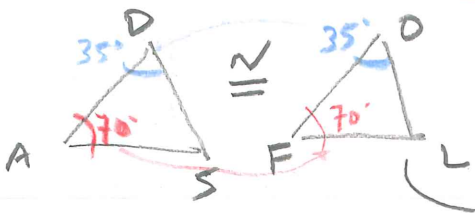


CO-B7a

Draw & Label consistently, order matters

6. Given $\triangle ADS \cong \triangle FOL$. $\angle A = 70^\circ$, $\angle O = 35^\circ$. Find the measure of $\angle L$.

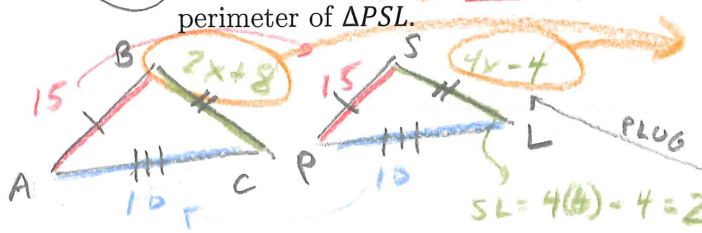


- $\angle A \cong \angle F$
- $\angle D \cong \angle O$
- $\angle S \cong \angle L$?

RECALL All \triangle 's angles add up to 180

$$180 - 70 - 35 = 75^\circ$$

7. Given $\triangle ABC \cong \triangle PSL$, $AB=15$, $SL=4x-4$, $PL=10$, and $BC=2x+8$. Find the value of x and find the perimeter of $\triangle PSL$.



$$BC \cong SL \Rightarrow 2x + 8 = 4x - 4$$

$$8 = 2x - 4$$

$$+4 \quad +4$$

$$12 = 2x$$

$$\frac{12}{2} = \frac{2x}{2}$$

$$6 = x$$

$$SL = 4(6) - 4 = 20$$

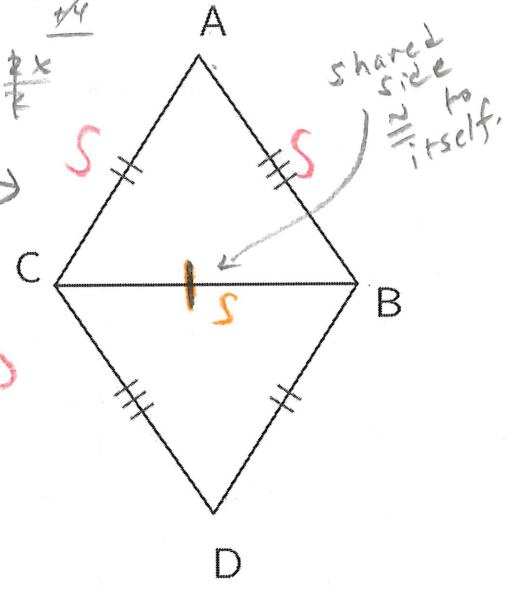
$$\text{Perimeter: } 15 + 10 + 20 = 45$$

CO-B8a

8. Which criteria can show these two triangles are congruent?

9. Complete the congruence statement: $\triangle ABC \cong \triangle$ _____

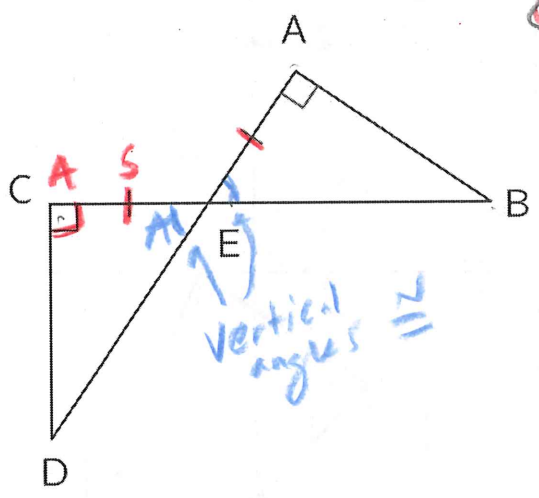
order matters **$\triangle DCB$**



10. Which criteria can show these two triangles are congruent?

11. Complete the congruence statement: $\triangle ABE \cong \triangle$ _____

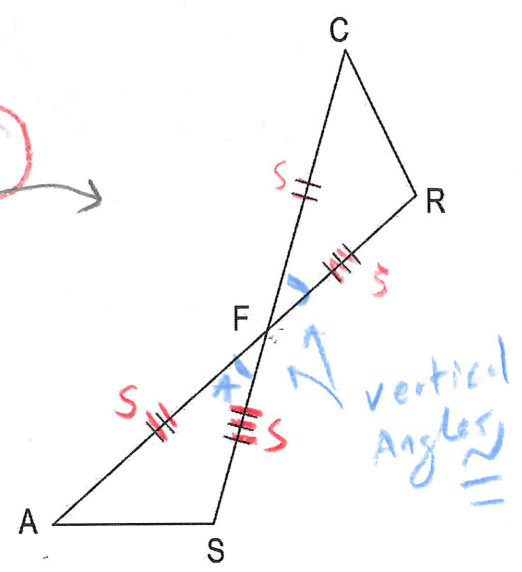
$\triangle CDE$



12. Which criteria can show these two triangles are congruent?

13. Complete the congruence statement: $\triangle FAS \cong \triangle$ _____

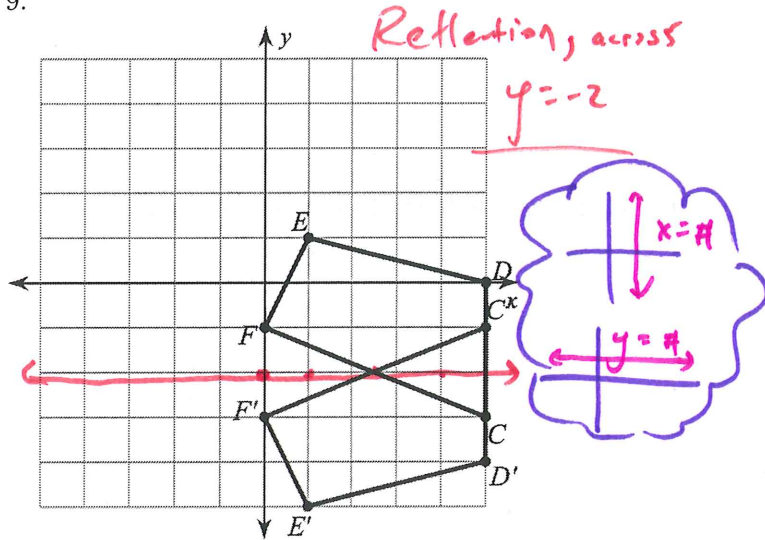
$\triangle FCR$



CO-A5a:

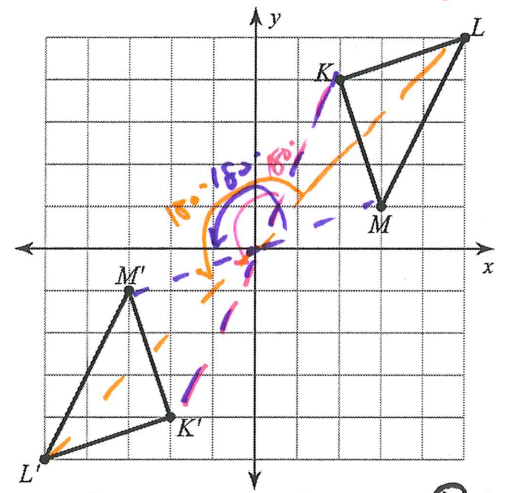
In each image below, a single transformation has taken place. First, identify it as a translation, reflection, or rotation. Then, give either the arrow notation rule for translation, the equation/axis of the reflection line, or the degree/direction/center of rotation.

9.



10.

Rotation: 180° about origin



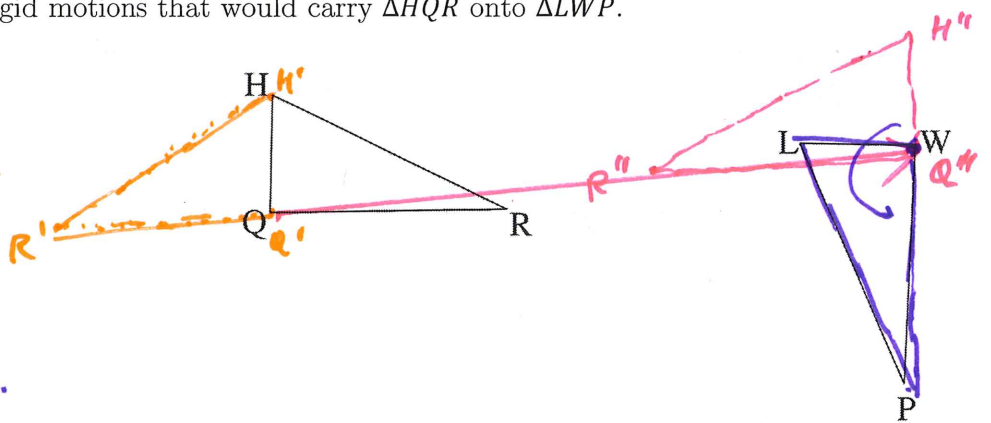
$M: (3, 1) \rightarrow M'(-3, -1)$ Pattern?
 $K: (2, 4) \rightarrow K'(-2, -4)$ $(-x, -y)$
 $L: (5, 5) \rightarrow L'(-5, -5)$ $\Rightarrow 180^\circ$ rotation!

CO-B6a:

11. Describe in detail a sequence of rigid motions that would carry $\triangle HQR$ onto $\triangle LWP$.

Possible Answer:

- ① Reflect $\triangle HQR$ across \overline{HQ}
- ② Translate $\triangle H'Q'R'$ along vector $\overrightarrow{Q'W}$
- ③ Rotate $\triangle H''Q''R''$ ccw about W until R'' is on P .



Scenario for #12-13:

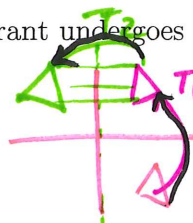
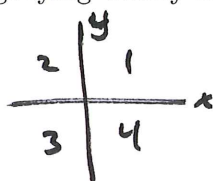
Suppose T_1 is a transformation with rule $(x, y) \rightarrow (-y, x)$ and T_2 is a transformation with rule $(x, y) \rightarrow (-x, y)$.

12. Determine whether each transformation a translation, reflection, or rotation and describe in detail what each rule does to the figure's location.

T_1 is a rotation. It moves a figure 90° ccw about the origin.
 T_2 is a reflection across the y-axis.

13. Suppose a pre-image lying wholly in the fourth quadrant undergoes T_1 , followed by T_2 . In which quadrant is the resulting image?

know this:



quadrant 2