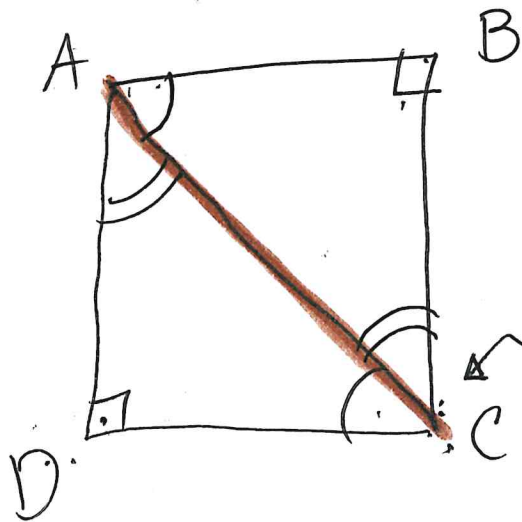


# 9/23 Lesson 21 Transformations

ie1  $\triangle ABC$  is reflecting to  $\triangle ADC$



line of reflection  
 $\overline{AC}$

$$y = -x$$

Corr.  $\angle$ 's

$$\angle BAC \rightarrow \angle ACD$$

$$\angle ABC \rightarrow \angle ADC$$

$$\angle BCA \rightarrow \angle DAC$$

Corr. sides

$$\overline{AB} \rightarrow \overline{DC}$$

$$\overline{BC} \rightarrow \overline{DA}$$

$$\overline{AC} \rightarrow \overline{AC} \text{ (Reflexive)}$$

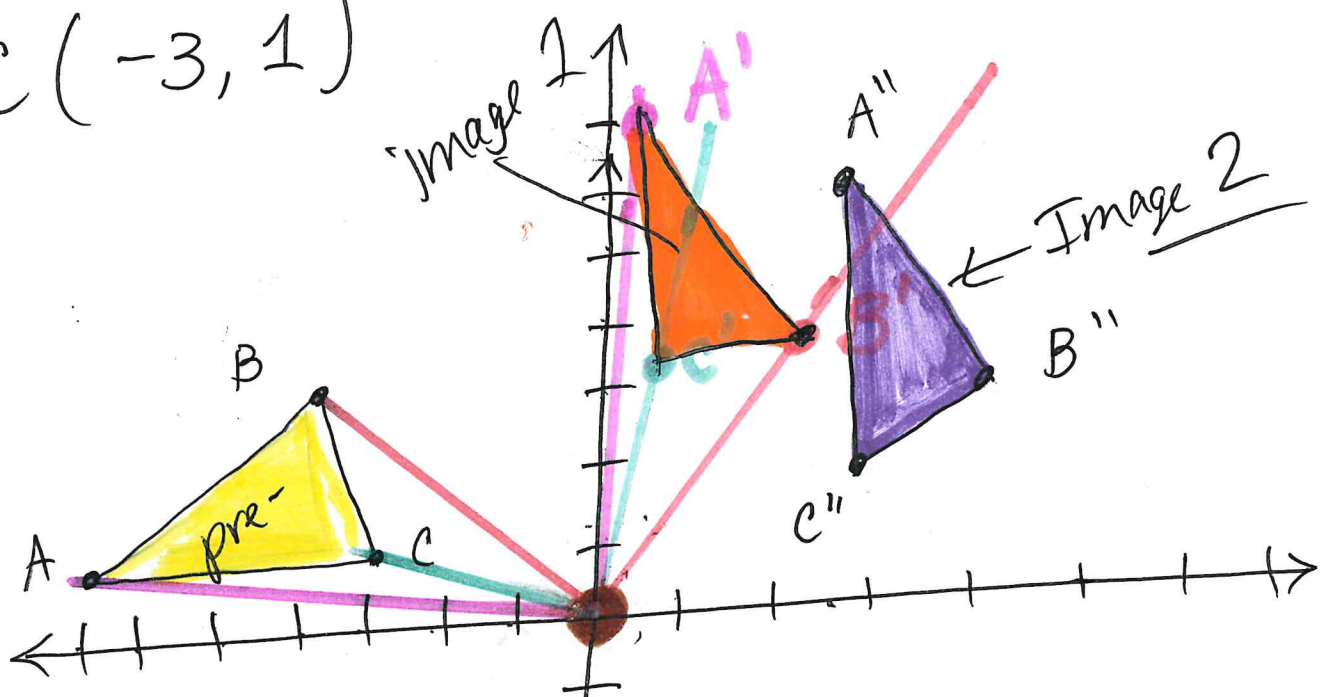
(1)

ie 2

- $A(-7, 1)$
- $B(-4, 3)$
- $C(-3, 1)$

Composition

- ① Rotate  $90^\circ$  CW origin
- ② then  $(x, y) \rightarrow (x+2, y-1)$



Protractor top numbers - CW.  
 bottom numbers - CCW. \* \*

- $A'(0.5, 7)$
- $B'(2, 4)$
- $C'(1, 3)$

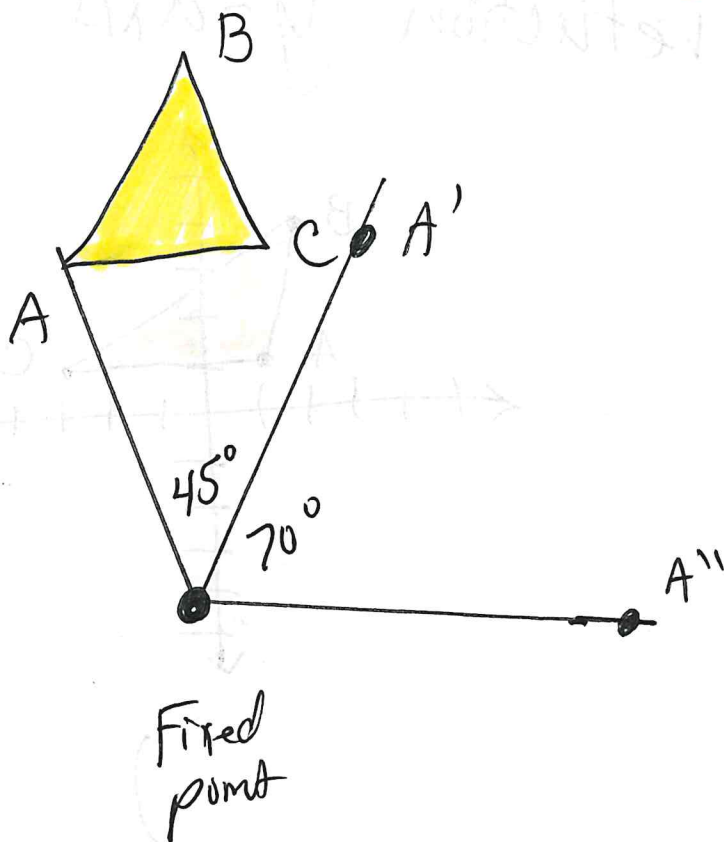


- $A''(0.5+2, 7-1)$   
 $(2.5, 6)$
- $B''(2+2, 4-1)$   
 $(4, 3)$
- $C''(1+2, 3-1)$   
 $(3, 2)$

Lesson 21 HWK pgs. 12B- #1-2

1.) 2 rotations

45° CW then  
70° CW



①

2.) Translation

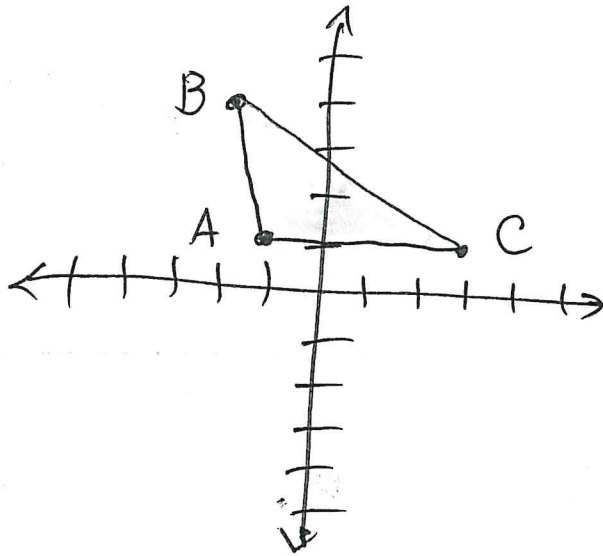
$$(x, y) \rightarrow (x-2, y+3)$$

then reflection  $y$ -axis

$$A(-1, 1)$$

$$B(-2, 4)$$

$$C(3, 1)$$



$$A' ( \quad )$$

$$B' ( \quad )$$

$$C' ( \quad )$$

Reflection  $y$ -axis  $(x, y) \rightarrow (-x, y)$

$$A'' ( \quad ) \quad C'' ( \quad )$$

$$B'' ( \quad )$$