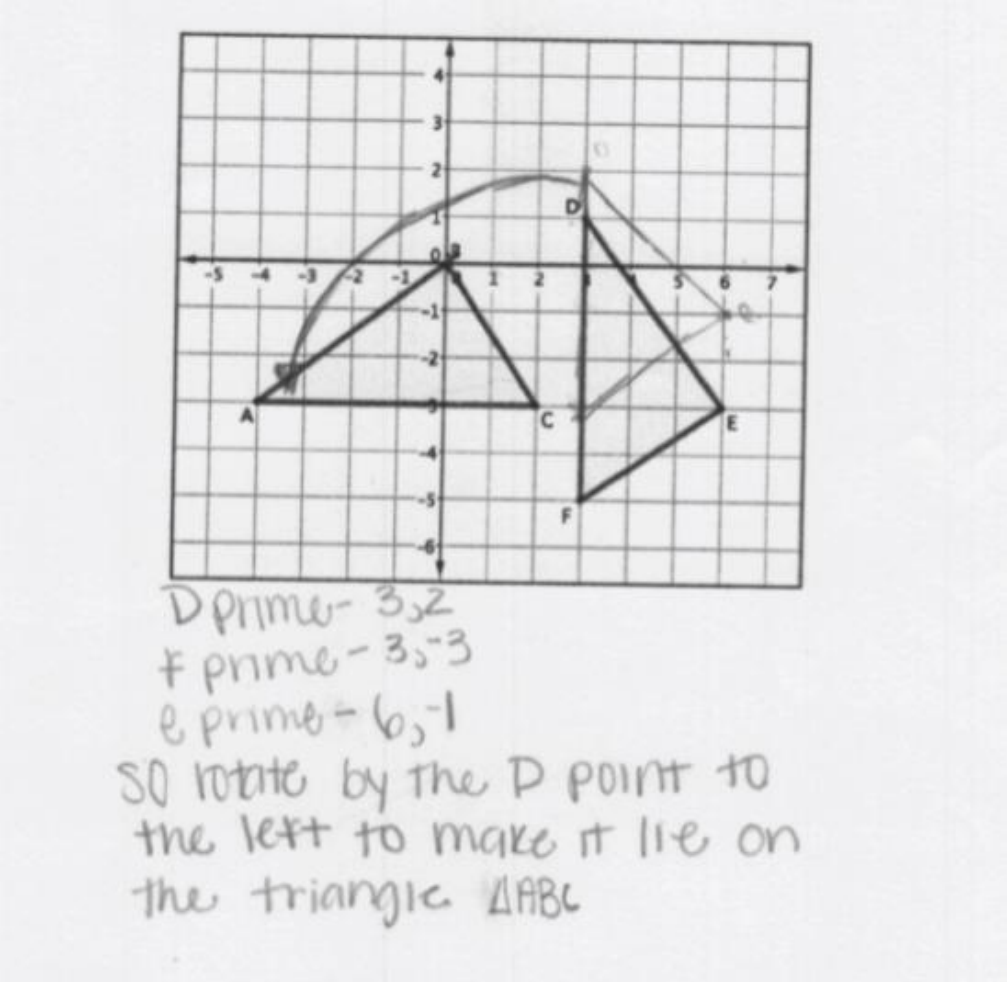
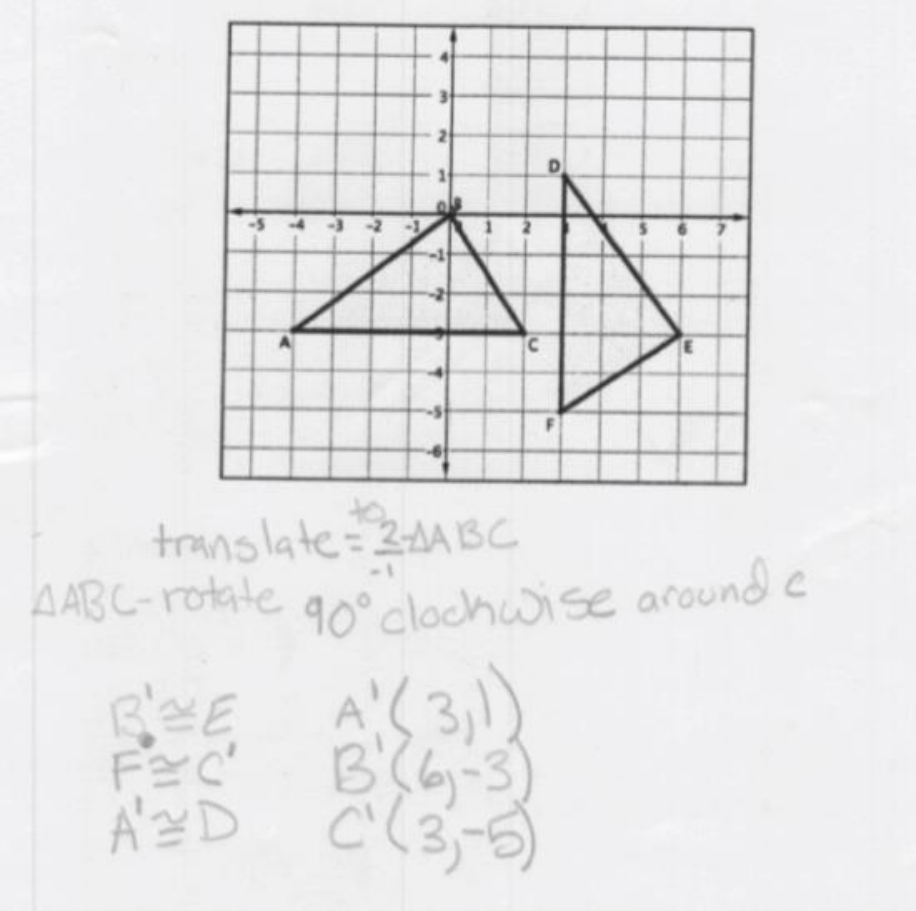
Student #1



CPALMS. (2014). Showing Triangles Congruent Using Rigid Motion. Retrieved from http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64472

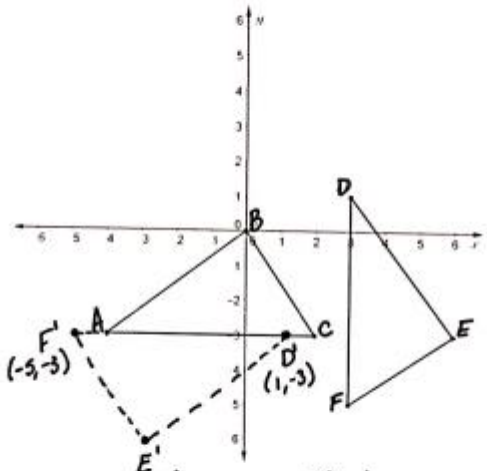
Student #2



CPALMS. (2014). Showing Triangles Congruent Using Rigid Motion. Retrieved from http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64472

Student #3

Given ΔABC with vertices $A\ (-4,-3)$, $B\ (0,0)$, $C\ (2,-3)$ and ΔDEF with vertices $D\ (3,1)$, $E\ (6,-3)$, $F\ (3,-5)$, use the definition of congruence in terms of rigid motion to show that $\Delta ABC \cong \Delta DEF$. Describe each rigid motion in terms of coordinates (x, y).



	$R_{(origin,-90°)}$	$(x,y) \to (-x,y)$	Reflect over $y=-3$	$(x,y) \to (x-3,y)$
D(3,1)	(1,-3)	(-1,-3)	(-1,-3)	(-4,-3)
E(6,-3)	(-3,-6)	(3,-6)	(3,0)	(0,0)
F(3,-5)	(-5,-3)	(5,-3)	(5,-3)	(2,-3)
	1st	2nd	3rd	4th

pts. D, E, F coincide with pts. A, B, C

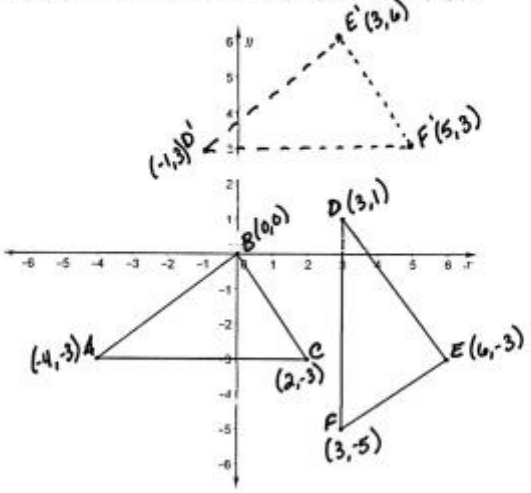
$\angle A \cong \angle D$ $\quad \overline{ED} \cong \overline{AB}$

$\angle B \cong \angle E$ $\quad \overline{EF} \cong \overline{CB}$ $\quad \to \Delta ABC \cong \Delta DEF$

$\angle C \cong \angle F$ $\quad \overline{DF} \cong \overline{CA}$

Student #4 _____ _____

vith vertices $A\ (-4,-3)$, $B\ (0,0)$, $C\ (2,-3)$ and ΔDEF with vertices $D\ (3,1)$, 3, −5), use the definition of congruence in terms of rigid motion to show that F. Describe each rigid motion in terms of coordinates (x, y).



- Rotate ΔDEF 90° counter-clockwise around the origin.
- Translate ΔD'E'F' down 6 units and left 3 units
- After doing these transformations the result is ΔABC.

$\Delta ABC \cong \Delta DEF$

↳ $\angle A \cong \angle D$ $\quad \overline{AB} \cong \overline{DE}$

$\angle B \cong \angle E$ $\quad \overline{BC} \cong \overline{EF}$

$\angle C \cong \angle F$ $\quad \overline{AC} \cong \overline{DF}$