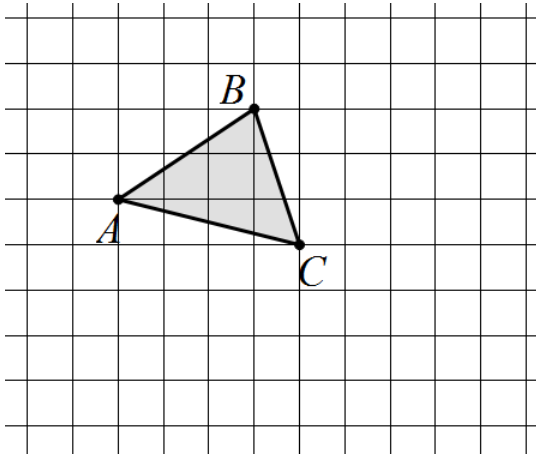
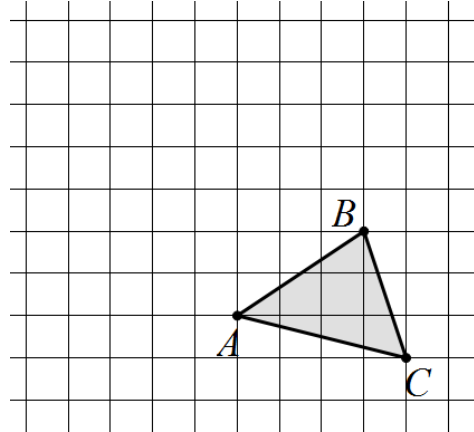


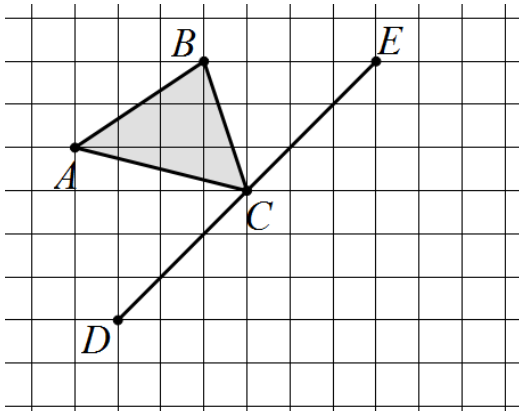
1. Graph & label the image of  $\triangle ABC$  under  $R_{C,90^\circ}$ .



2. Graph & label the image of  $\triangle ABC$  under  $D_{C,2}$ .



3. Graph & label the image of  $\triangle ABC$  under  $T_{\overline{CD}} \circ r_{\overline{DE}}$ .



4. Which of the transformations in numbers 1 through 3 are Rigid Motions? Explain your reasoning.

5.

a. Is  $\triangle ABC$ , from question 1, Isosceles? **Justify** your reasoning.

b. Is  $\triangle ABC$ , from question 1, a Right Triangle? **Justify** your reasoning.

6. Write the converse, inverse and contrapositive of the conditional:

*If 2 angles are vertical, then they are congruent.*

Converse: \_\_\_\_\_

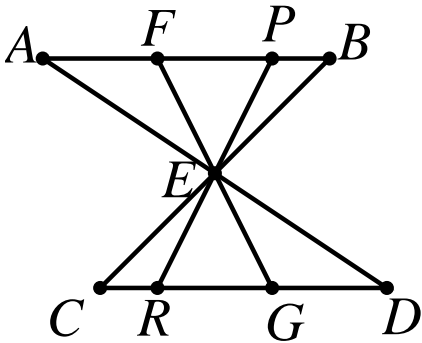
Inverse: \_\_\_\_\_

Contrapositive: \_\_\_\_\_

7. Which statement in number 8 is logically equivalent to the original, given conditional? Explain.

8. Complete the two – Column proof:

Given:  $\overline{AB} \cong \overline{DC}$   
 $\overline{FP} \cong \overline{GR}$   
 $\overline{BP} \cong \overline{CR}$   
 Prove:  $\overline{AF} \cong \overline{DG}$



Statements	Reasons
$BP = CR$	
$FP = GR$	
$BP + FP = CR + FP$	
$BP + FP = CR + GR$	
$BF = CG$	
$AB = DC$	
$AF + BF = DG + CG$	
$AF + CG = DG + CG$	
$AF = DG$	