

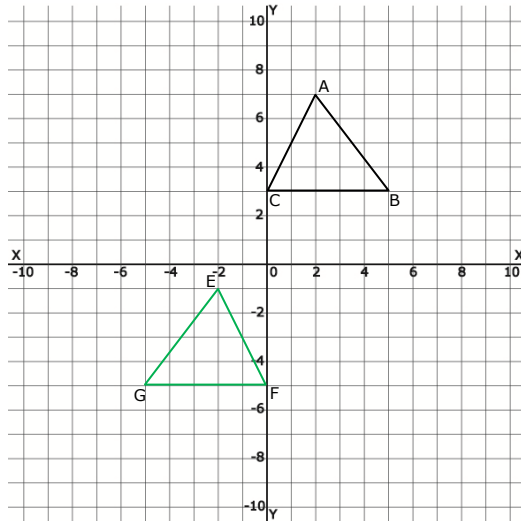
Name \_\_\_\_\_

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## Rigid Motions and Congruent Triangles - Step-by-Step Lesson

Use the definition of congruence in terms of rigid motions to determine whether the two figures are congruent and explain your answer.

You can map  $\triangle ABC$  to  $\triangle EFG$  by a translation followed by a reflection. Provide the coordinate notation for each.



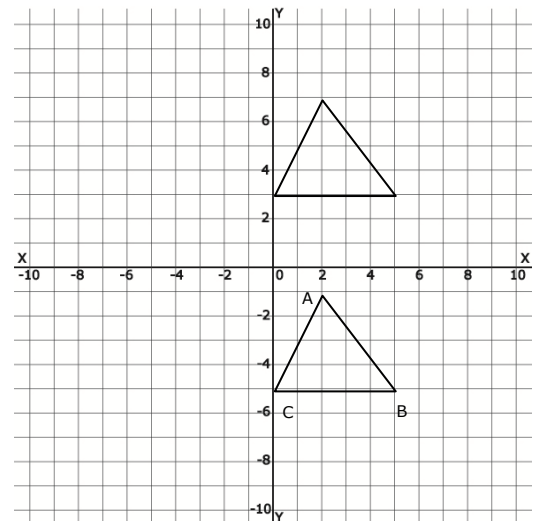
Step 1) Translation Notation:

All points move down

8 units or  $y = -8$

Notation would be

$T(0, -8)$



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Step 2)

“Provide the coordinate notation for each.”

Step 2) Reflection in y-axis:

A  $(2, -1) \dots (-2, -1)$

B  $(5, -5) \dots (-5, -5)$

C  $(0, -5) \dots (0, -5)$

Notation would be:

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

