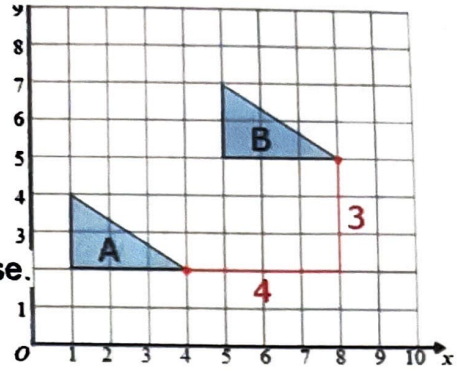
Unit 3 Study Guide

1) What are 5 ways to prove the congruent part of the congruent triangle is congruent?

SSS SAS AAS ASA HL



2) Triangle FGH is translated 4 right and 3 up

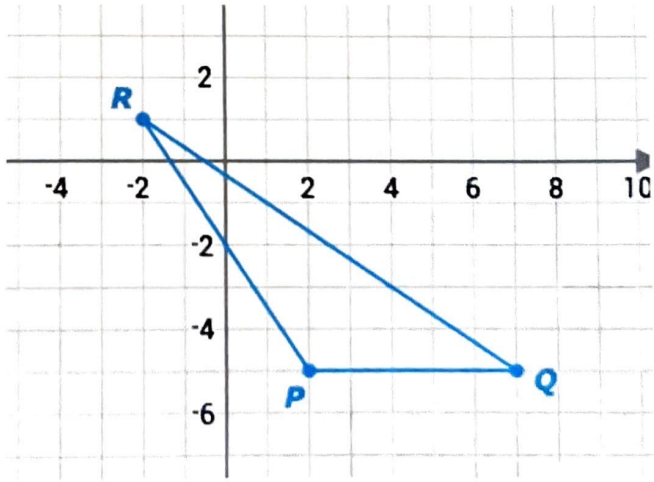
Determine whether each statement in the table is true or false.

Statement	True	False
The measure of angle *F* is less than the measure of angle *F′*.	○	●
Side *FH* is the same length as side *F′H′*.	●	○
Angle *H* has the same measure as angle *H′*.	●	○

3) Which transformation results in a figure similar but not congruent to its image?

Dilation

4) Write the coordinates of the vertices after a translation 8 units left and 5 units down.



P′ (-6 , -10)

Q′ (-1 , -10)

R′ (-10 , -4)

(x, y)	(x-8, y-5)
P (2, -5)	P′(-6, -10)
Q (7, -5)	Q′ (-1, -10)
R (-2, 1)	R′ (-10, -4)

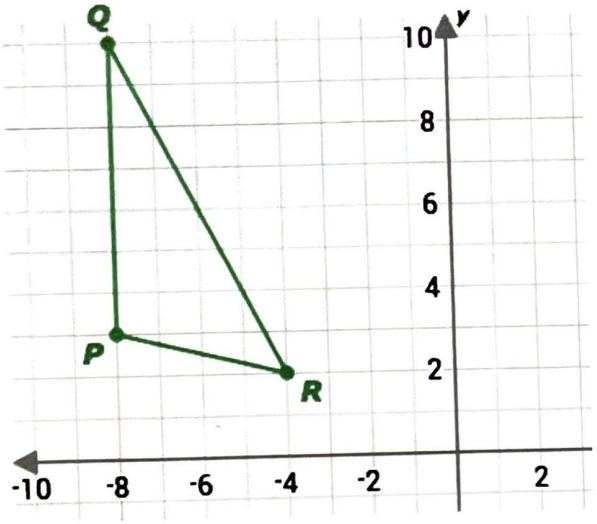
5) Write the coordinates of the vertices after a rotation 270° counterclockwise

$P'(3, 8)$

$Q'(10, 8)$

$R'(2, 4)$

(x, y)	$(y, -x)$
$P(-8, 3)$	$P'(3, 8)$
$Q(-8, 10)$	$Q'(10, 8)$
$R(-4, 2)$	$R'(2, 4)$



6) Point W is in Quadrant 2 and is reflected across the x-axis and then rotated 180 counterclockwise about the origin. In which quadrant is the image of point W?

Q = I

7) Triangles *GHI* and *NMO* are congruent. Which of the following statements are true? Select True or False for each statement.

Statement	True	False
$\overline{HI} \cong \overline{MO}$	●	
$\overline{GI} \cong \overline{NO}$	●	
$\angle HGI \cong \angle MON$		●
$\angle GHI \cong \angle MNO$		●

8) Make sure you've reviewed 5 ways to prove the congruent part of the congruent triangle is congruent!!!!!!!!!!