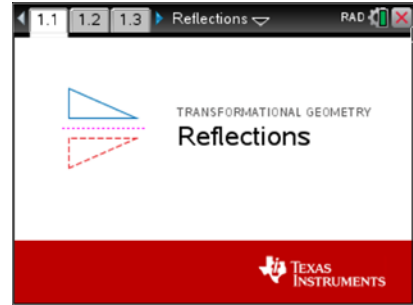




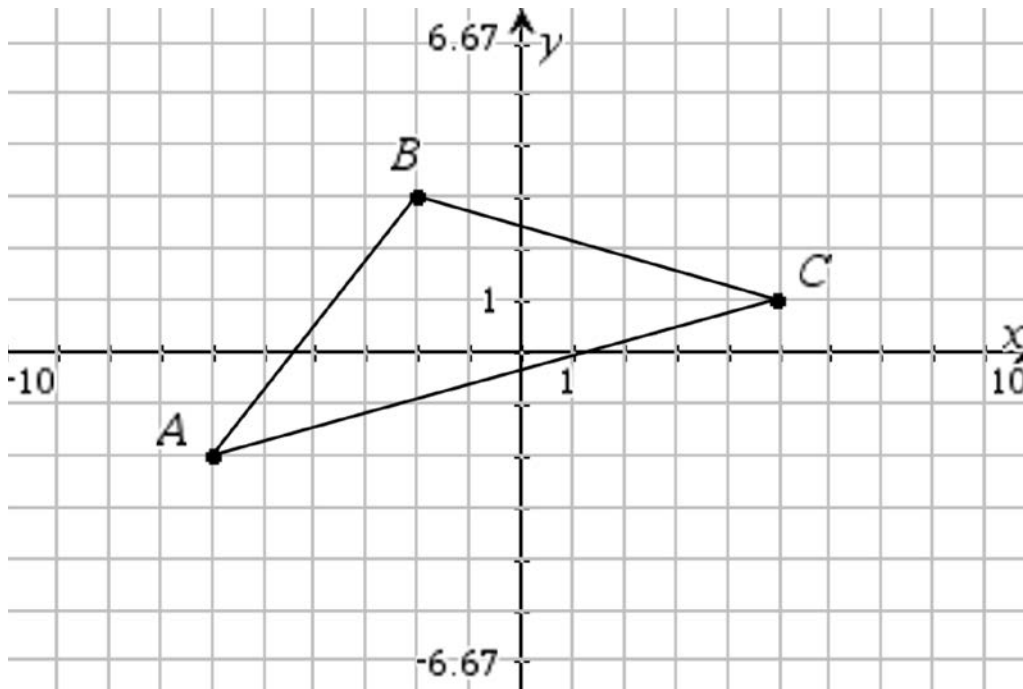
In this lesson, you will be given the opportunity to summarize, review, explore and extend ideas about Reflections.

**It is important the Reflections Tour be done before any Reflections lessons.**



**1 – 4. Make a sketch of each in the grid supplied.**

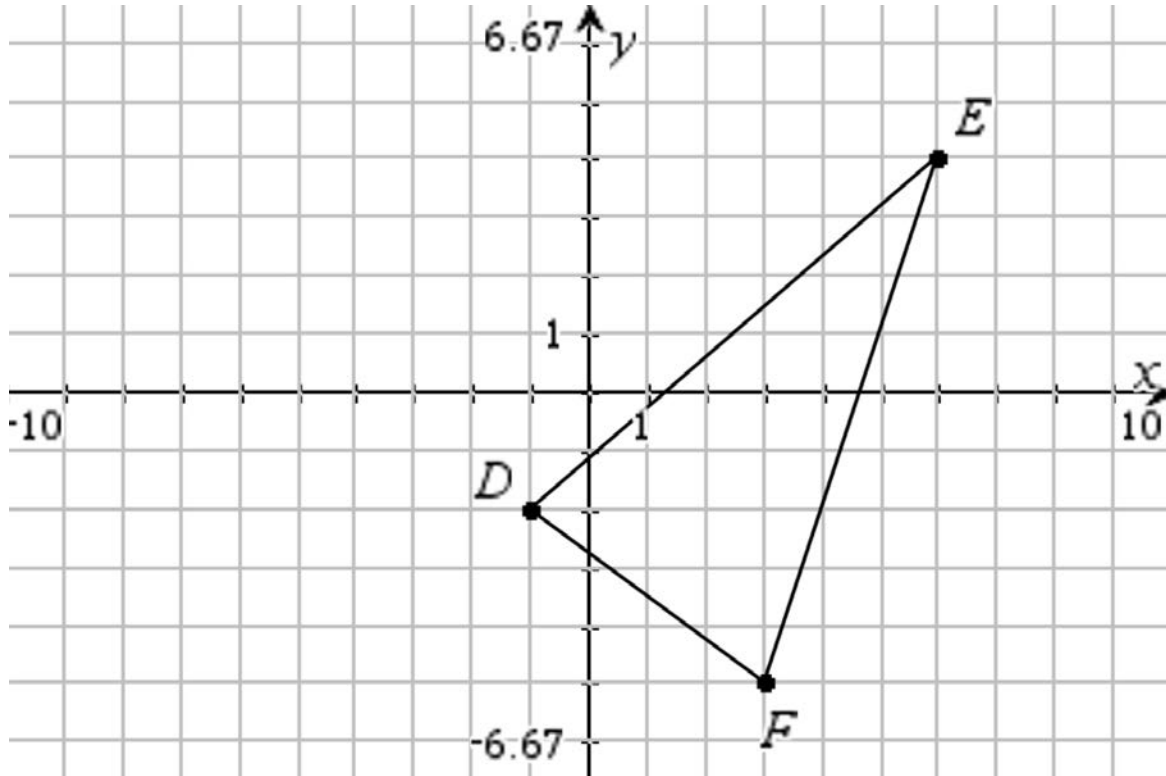
1. Reflect  $\triangle ABC$  about the x-axis. Then fill in the blanks with appropriate responses.



- If  $m\angle A = 35^\circ$ , then  $m\angle$  \_\_\_\_\_ = \_\_\_\_\_ $^\circ$
- If  $BC = 8$  cm, then \_\_\_\_\_ = \_\_\_\_\_ cm.
- If the slope of  $\overline{BC} = -\frac{2}{7}$ , then the slope of \_\_\_\_\_ = \_\_\_\_\_.
- If the perimeter of  $\triangle ABC = 17$  in, then the perimeter of \_\_\_\_\_ = \_\_\_\_\_
- If the coordinates of a point G on  $\triangle ABC$  are  $(x, y)$ , then the coordinates of G' are \_\_\_\_\_



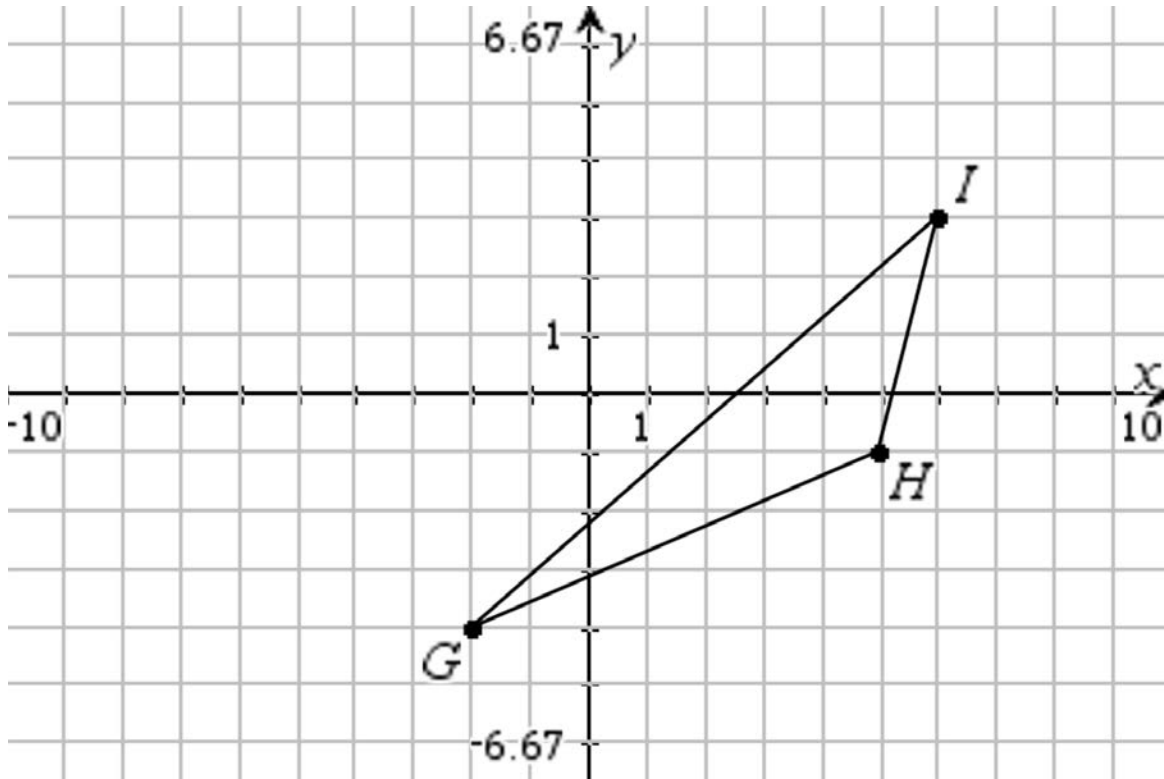
2. Reflect  $\triangle DEF$  about the y-axis. Then fill in the blanks with appropriate responses.



- a. If  $m\angle F = 70^\circ$ , then  $m\angle$  \_\_\_\_\_ = \_\_\_\_\_<sup>o</sup>
- b. if the slope of  $\overline{DE} = \frac{6}{7}$ , then the slope of \_\_\_\_\_ = \_\_\_\_\_
- c. If the coordinates of E are (6, 4), then the coordinates of \_\_\_\_\_ are \_\_\_\_\_
- d. If the area of  $\triangle DEF$  is 24 sq cm, then the area of \_\_\_\_\_ is \_\_\_\_\_
- e. If the coordinates of a point H on  $\triangle DEF$  are (x, y), then the coordinates of H' are \_\_\_\_\_



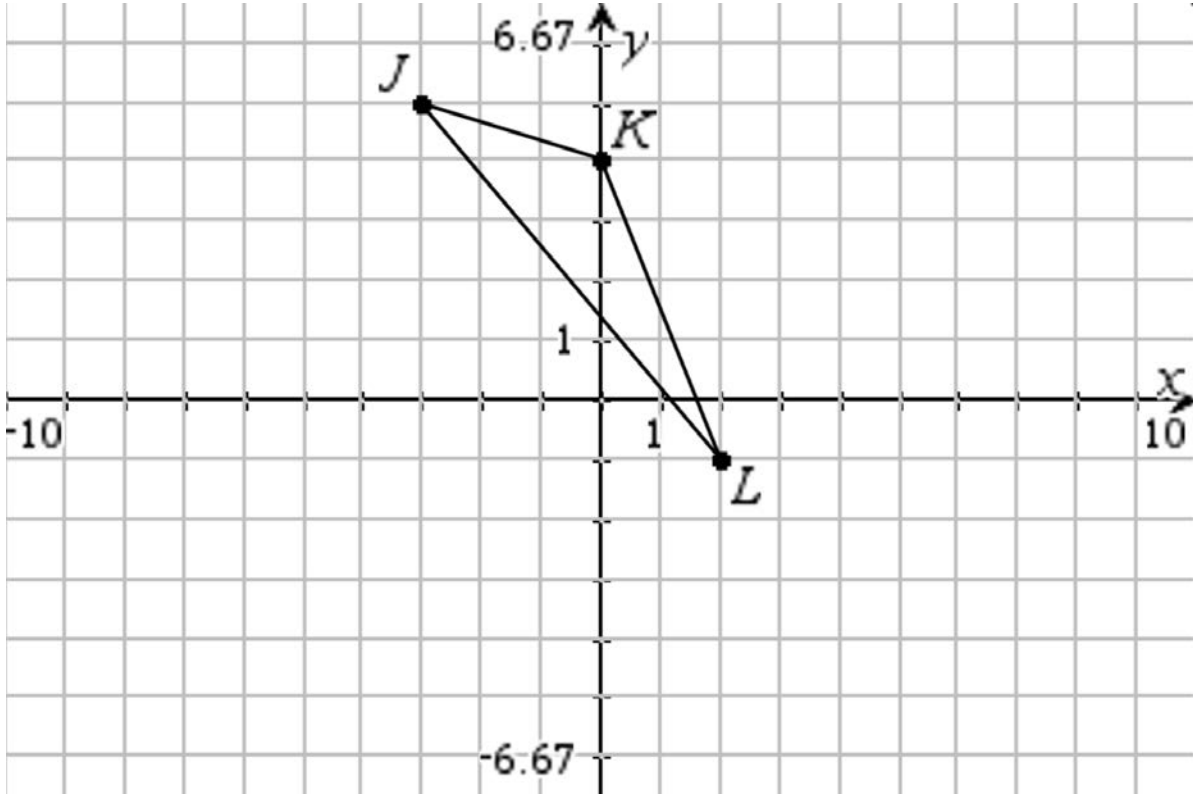
3. Reflect  $\triangle GHI$  about the line  $y = x$ . Then fill in the blanks with appropriate responses.



- a. If  $GH = 9$  in, then \_\_\_\_\_ = \_\_\_\_\_ in
- b. If the perimeter of  $\triangle GHI$  is 36 cm, then the perimeter of \_\_\_\_\_ is \_\_\_\_\_.
- c. If the slope of  $\overline{HI} = 4$ , then the slope of \_\_\_\_\_ = \_\_\_\_\_
- d. If the coordinates of H are  $(5, -1)$ , then the coordinates of \_\_\_\_\_ are \_\_\_\_\_
- e. If the coordinates of a point P on  $\triangle GHI$  are  $(x, y)$ , then the coordinates of P' are \_\_\_\_\_



4. Reflect  $\triangle JKL$  about the line  $y = -x$ . Then fill in the blanks with appropriate responses.



- If  $m\angle K = 125^\circ$ , then the  $m\angle$  \_\_\_\_\_ = \_\_\_\_\_<sup>o</sup>
- If  $JL = 24$  in, then \_\_\_\_\_ = \_\_\_\_\_ in
- If the area of  $\triangle JKL = 40$  sq in, then the area of \_\_\_\_\_ = \_\_\_\_\_
- If the slope of  $\overline{JK} = -\frac{1}{3}$ , then the slope of \_\_\_\_\_ = \_\_\_\_\_
- If the coordinates of L are  $(2, -1)$ , then the coordinates of \_\_\_\_\_ are \_\_\_\_\_
- If the coordinates of a point Q on  $\triangle JKL$  are  $(x, y)$ , then the coordinates of Q' are \_\_\_\_\_



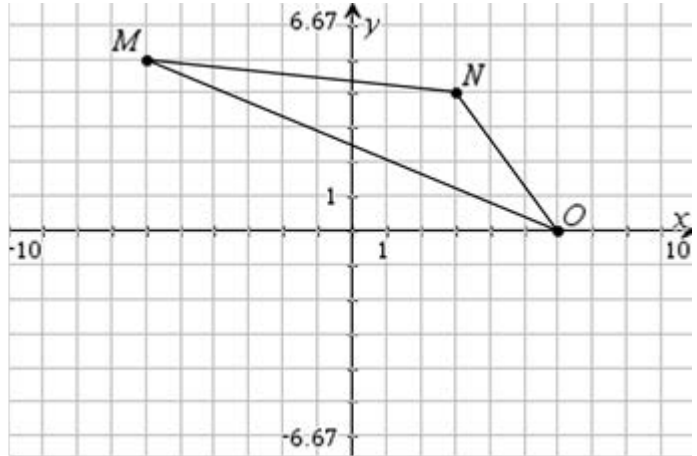
5. Reflect  $\triangle MNO$  about the line  $y = 3$ .

List the coordinates of each of the vertices:

M: \_\_\_\_\_ M': \_\_\_\_\_

N: \_\_\_\_\_ N': \_\_\_\_\_

O: \_\_\_\_\_ O': \_\_\_\_\_



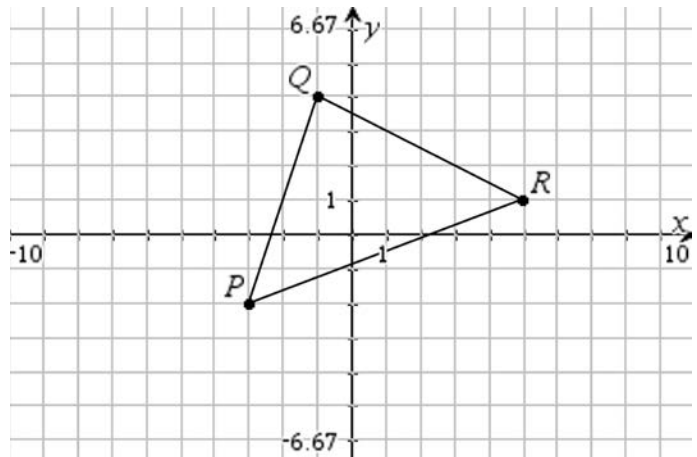
6. Reflect  $\triangle PQR$  about the line  $x = -2$ .

List the coordinates of each of the vertices:

P: \_\_\_\_\_ P': \_\_\_\_\_

Q: \_\_\_\_\_ Q': \_\_\_\_\_

R: \_\_\_\_\_ R': \_\_\_\_\_



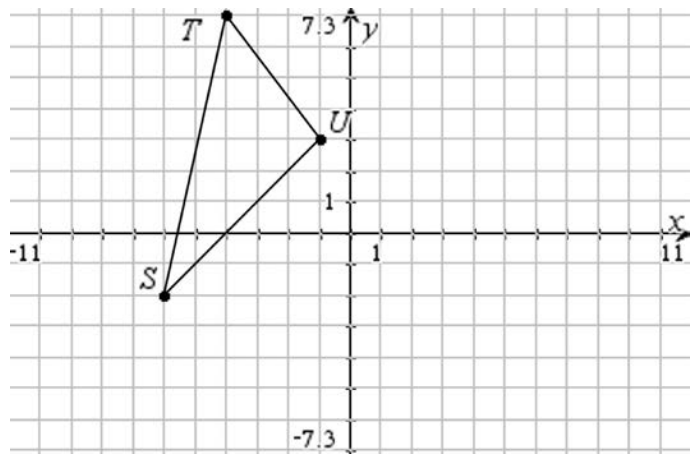
7. Reflect  $\triangle STU$  about the line  $y = 2x$ .

List the coordinates of each of the vertices:

S: \_\_\_\_\_ S': \_\_\_\_\_

T: \_\_\_\_\_ T': \_\_\_\_\_

U: \_\_\_\_\_ U': \_\_\_\_\_





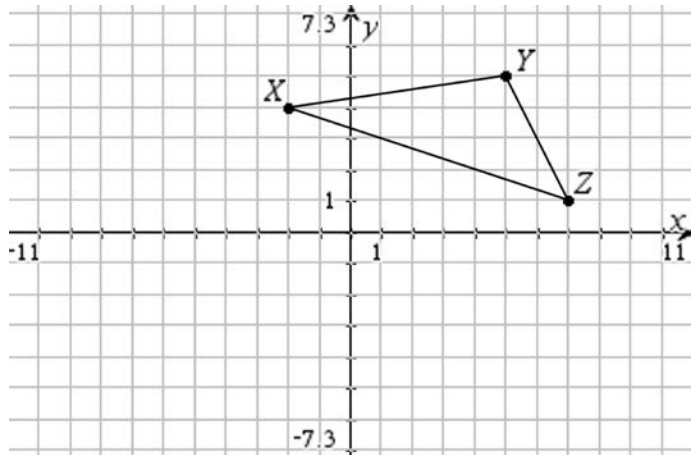
8. Reflect  $\triangle XYZ$  about the line  $y = -\frac{1}{3}x$ .

List the coordinates of each of the vertices:

X: \_\_\_\_\_ X': \_\_\_\_\_

Y: \_\_\_\_\_ Y': \_\_\_\_\_

Z: \_\_\_\_\_ Z': \_\_\_\_\_



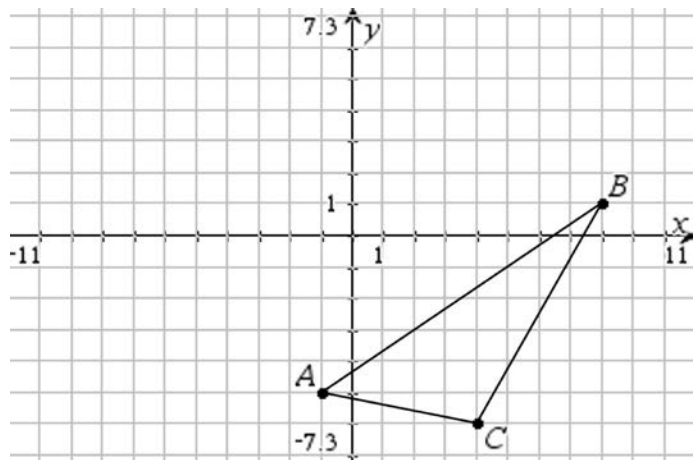
9. Reflect  $\triangle ABC$  about the line  $y = \frac{2}{3}x$ .

List the coordinates of each of the vertices:

A: \_\_\_\_\_ A': \_\_\_\_\_

B: \_\_\_\_\_ B': \_\_\_\_\_

C: \_\_\_\_\_ C': \_\_\_\_\_



10. Reflect  $\triangle DEF$  about the line  $y = x - 2$ .

List the coordinates of each of the vertices:

D: \_\_\_\_\_ D': \_\_\_\_\_

E: \_\_\_\_\_ E': \_\_\_\_\_

F: \_\_\_\_\_ F': \_\_\_\_\_

