Quarter 1 Review

Complete the following as a single rotaon

$$R_{x \text{ axis}} \; R_{y=x} \; = R_{o,\underline{\quad}} \; (x,y)$$

Given the function, *f(x)* = -3x + 4 what is the value of x when *f(x) = 16?*

Determine the <u>smallest positive</u> angle of rotation that would perform the same rotation as the given one.

$$R_{0,-220°} = R_{0,_____}°$$

$$R_{0,800°} = R_{0,_____}°$$

$$R_{0,-540°} = R_{0,_____}°$$

True/False

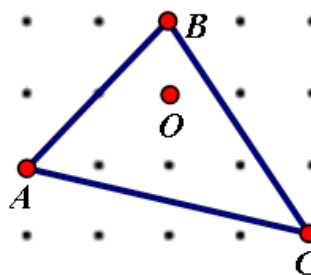G(x,y) --------> (-x,y) is a reflecon over the x axis.

What is the rotational symmetry when the order is 5?

Draw a diagram using arrows that is NOT a function.

Perform the following rotaons.

$$R_{O,90°}(\Delta ABC)$$

True / False

A regular decagon has 8 lines of symmetry?

$$R_{O,90°}(\Delta ABC)$$

a) A = (4,6) $R_{O,90°}(\Delta ABC)$ A ' = (____ , ____)

b) B = (7,0) $R_{O,90°}(\Delta ABC)$ B ' = (____ , ____)

c) C = (3,3) $R_{O,90°}(\Delta ABC)$ C ' = (____ , ____)

Given the coordinate rule, $T(x,y) \dashrightarrow (x-5, -y)$ determine the image of $A(-3, -2)$.

True/False

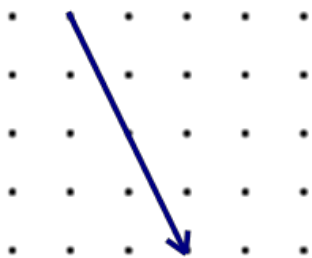A reflection of A (9,-8) over y=x results in A' (-9,8)

a) $R_{O,45°}(A) =$ _____

b) $R_{O,135°}(B) =$ _____

c) $R_{O,-90°}(D) =$ _____
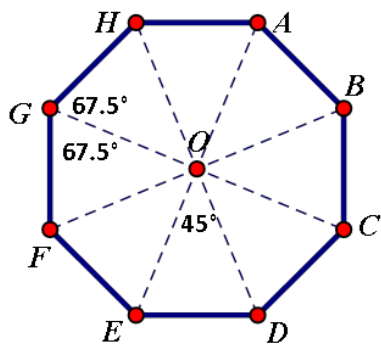
d) $R_{O,180°}($ _____ $) = B$

Write the translaon coordinate rule from the given vector.

Given the coordinate rule, $T(x,y) \dashrightarrow (x + 4, y-3)$ determine the pre-image of A' *(9, -5).*

Determine the translaon rule from the pre-image and image.

A (0,3) A' (1,0)

Given a translaon rule, determine the missing point.

T (x,y) ------- > (x - 8, y + 1)   A (5,1)   A' (_____ , _____)

T (x,y) ------- > (x - 2, y + 1)   A (_____ , _____)   A' (-1,-3)

If you wanted to translate a shape to the right 8 units, you could reflect over x = 6 and then x = _____.

If you wanted to translate a shape up 12 units, you could reflect over y = _____ and then y = -4.