

Transformations Test - 60

1) State (y or n) whether or not the following are functions.

a) $y - 3x = 5$

b) $x = \sqrt{y}$

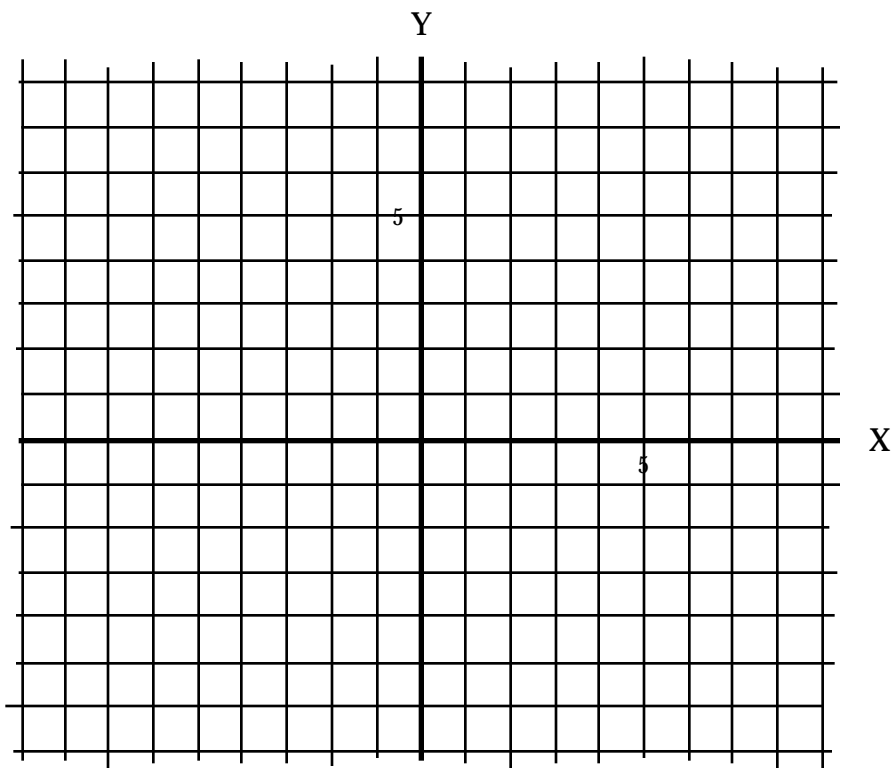
c) $x = -5$

2) Graph the equations.

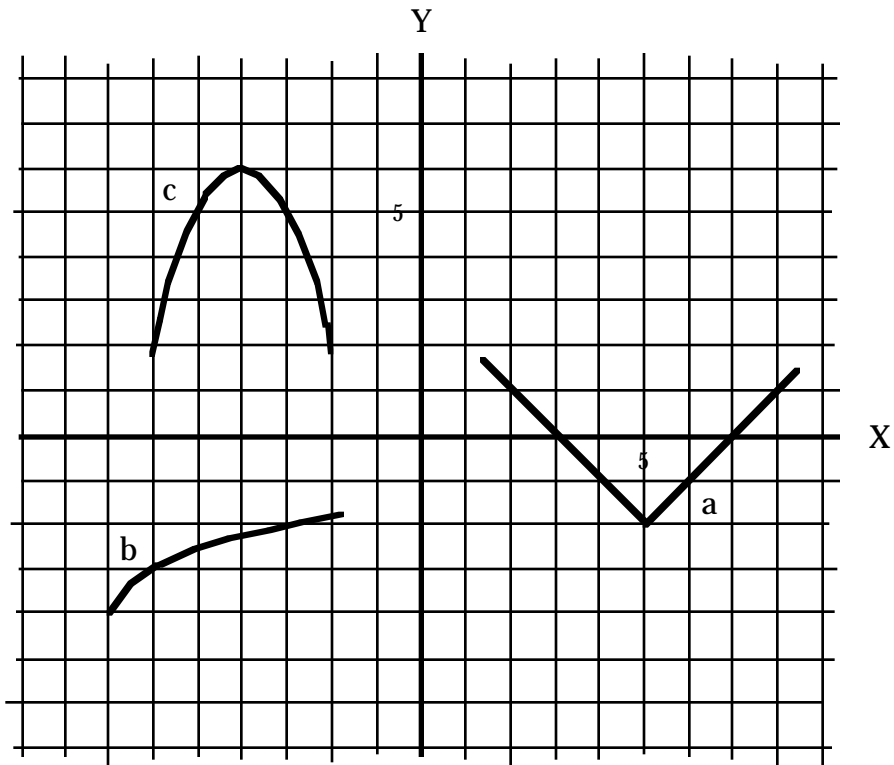
a) $y - 3 = \sqrt{x}$

b) $y + 4 = |x + 3|$

c) $y + 5 = (x - 4)^2$



3) Give the equations for the following graphs.

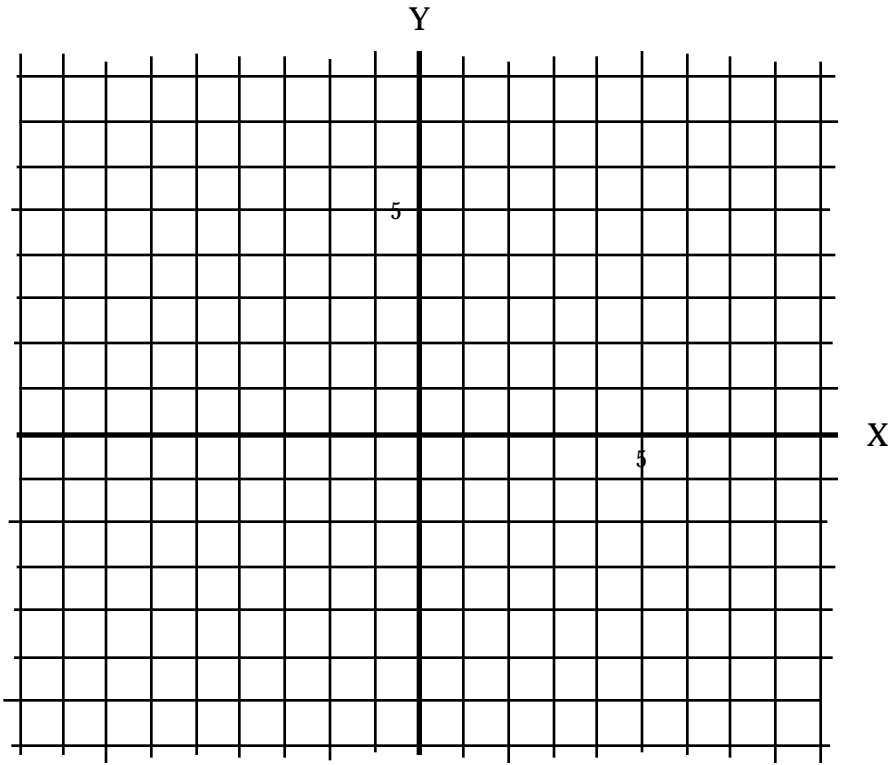


4) Graph the following:

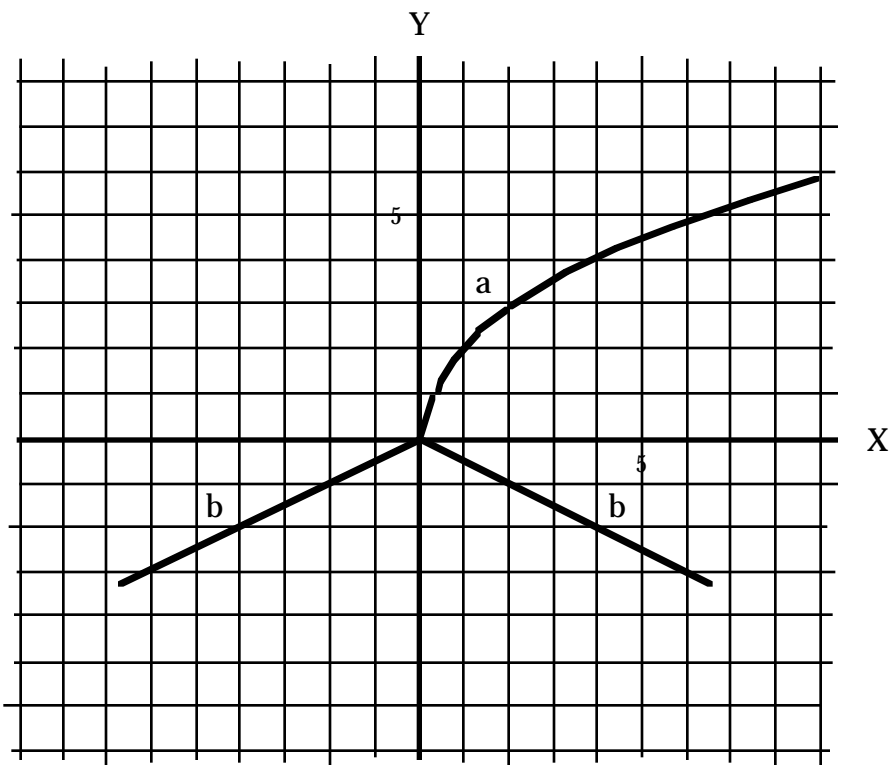
a) $y = (x + 4)^2$

b) $y = (-x + 4)^2$

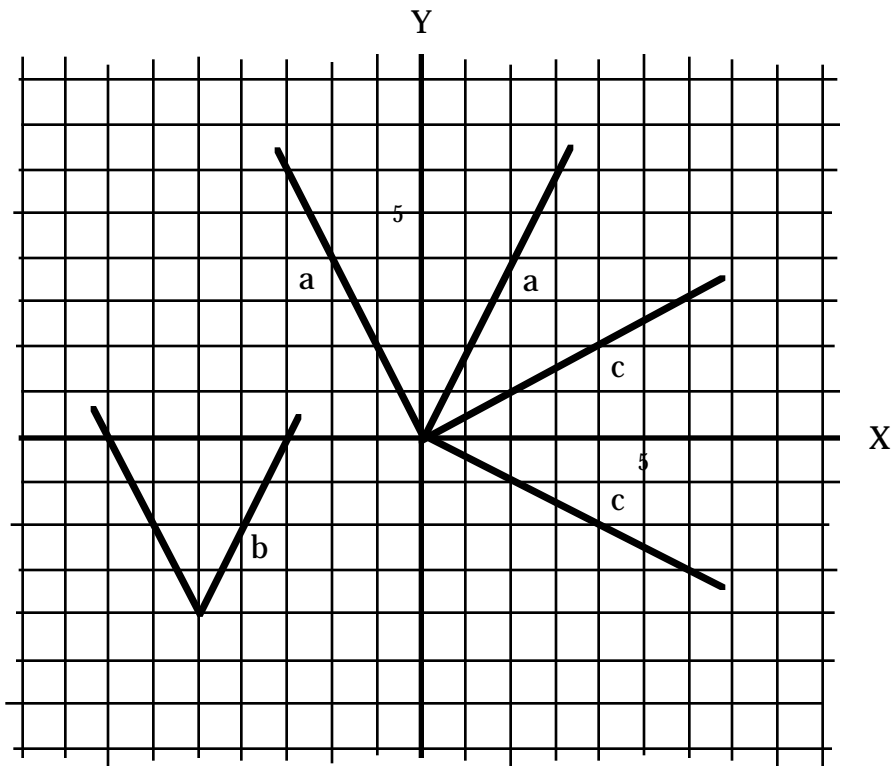
c) $x = (y + 4)^2$



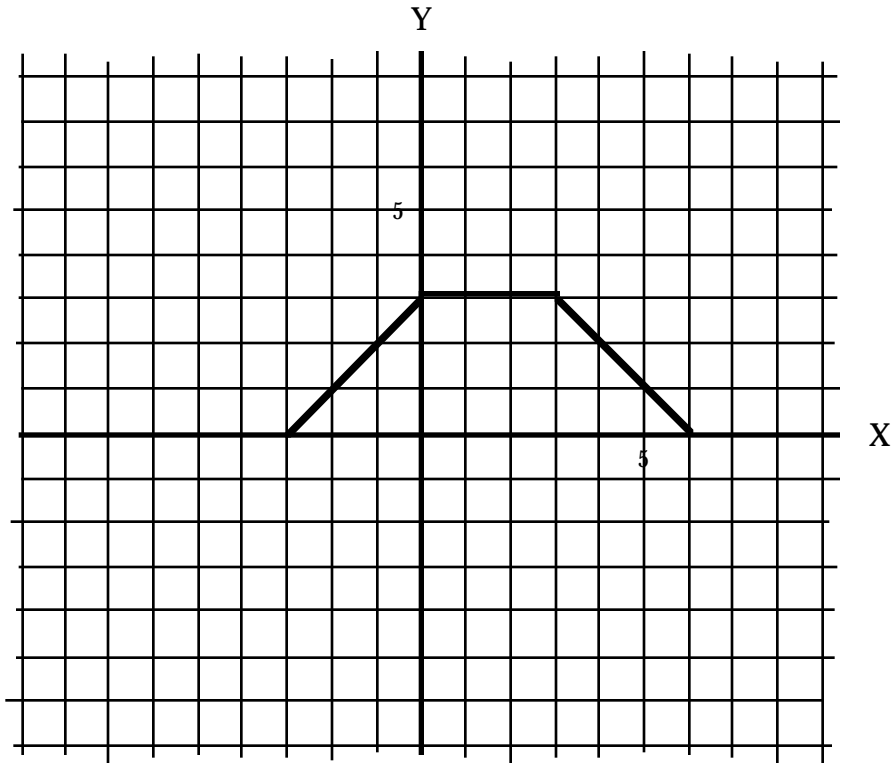
5) Give the equations for the two graphs; a, and b.



6) Give the equations for the three graphs; a, b, and c.



7) Given $y = f(x)$ shown below.



Graph the following equations.

a) $-y = f(x)$

b) $y = f(-x)$

c) $x = f(y)$

d) $x + 4 = f(y - 2)$

e) $3y = f(x)$

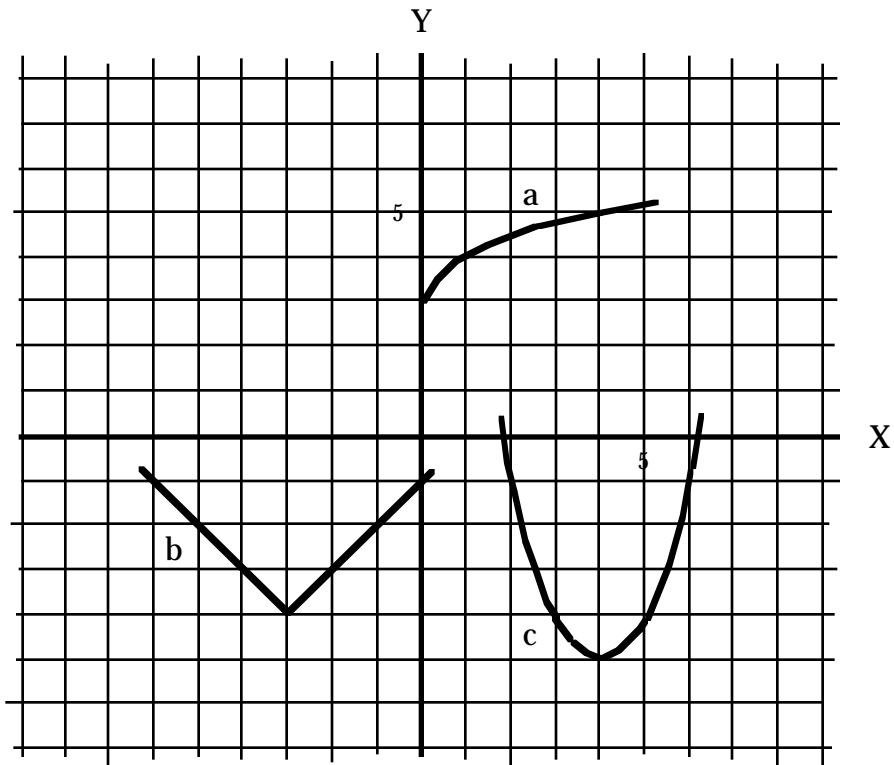
f) $y = f(3x)$

g) $y/2 = f(3x)$

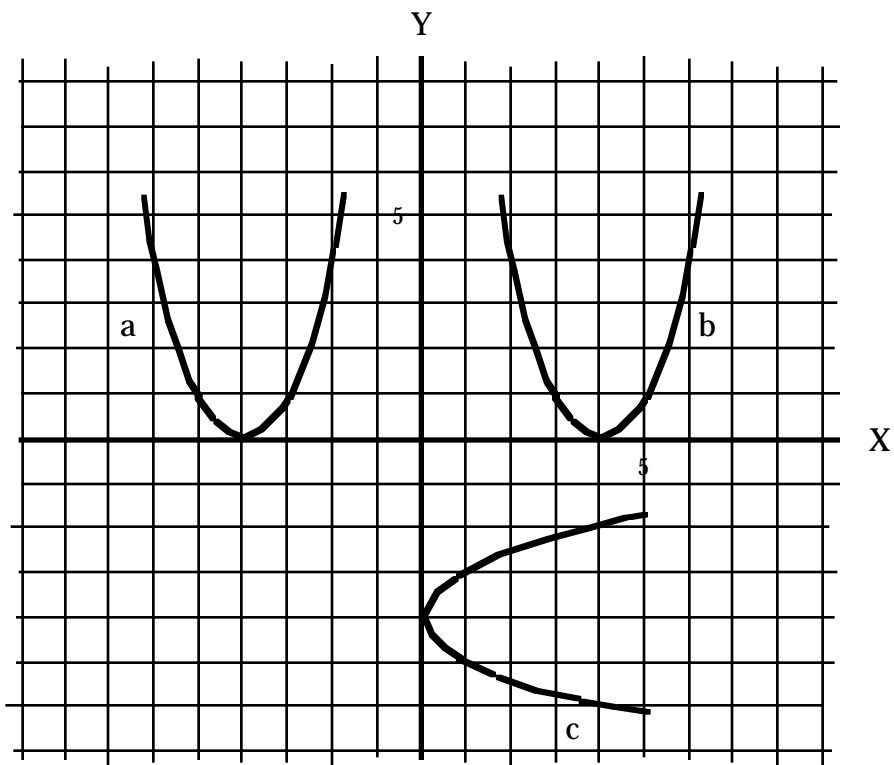
h) $(y - 1)/2 = f(3(x + 2))$

Answers:

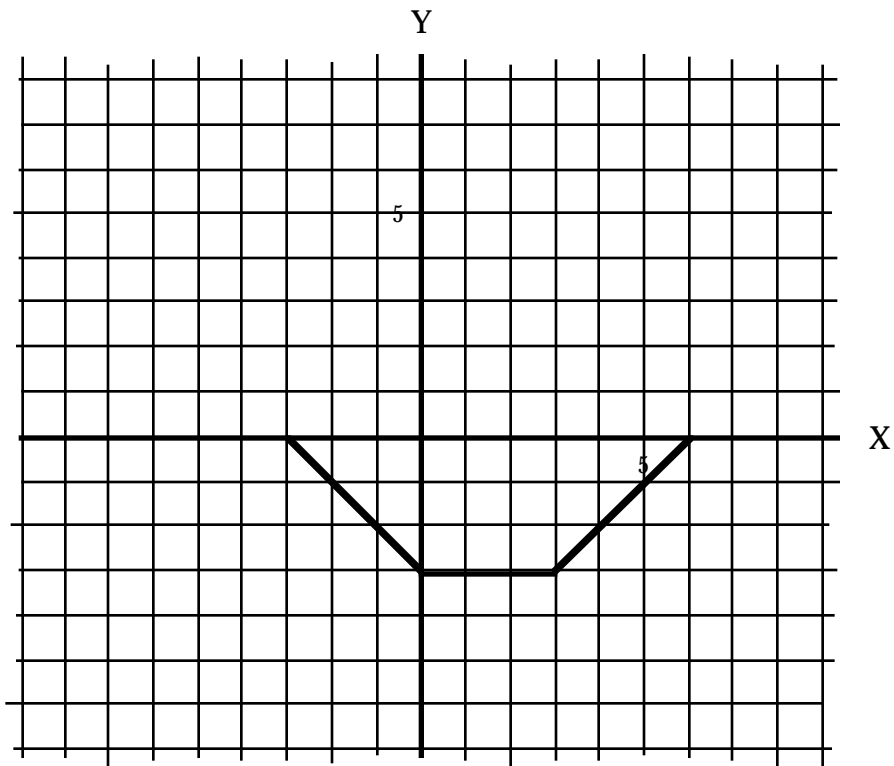
1)a) y, b) y, c) n, 2)



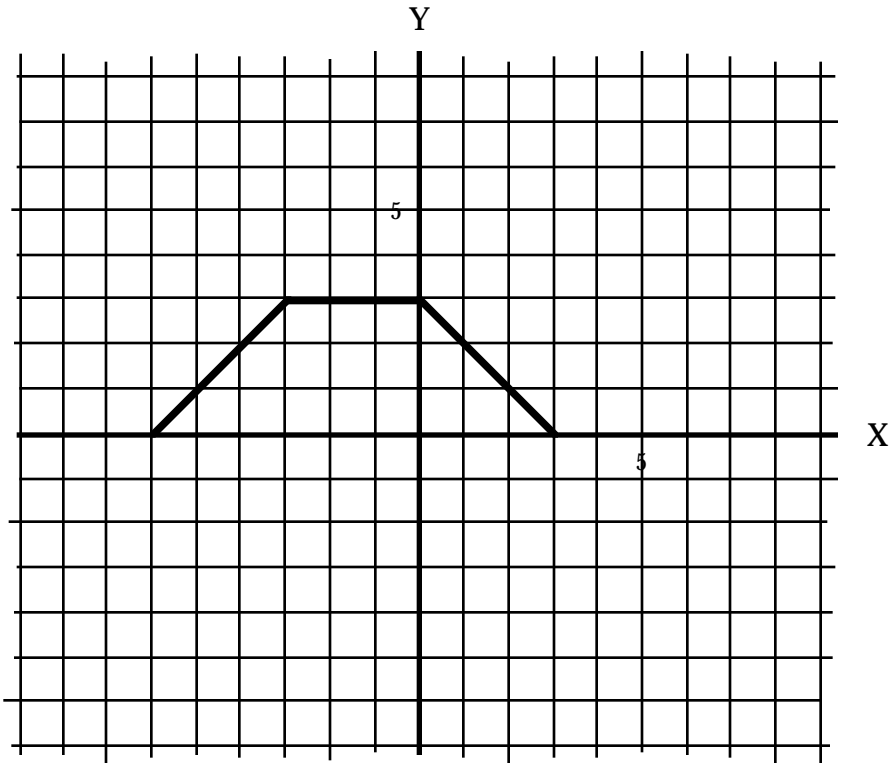
3) a) $y + 2 = |x - 5|$, b) $y + 4 = \sqrt{x + 7}$, c) $y - 6 = -(x + 4)^2$, 4)



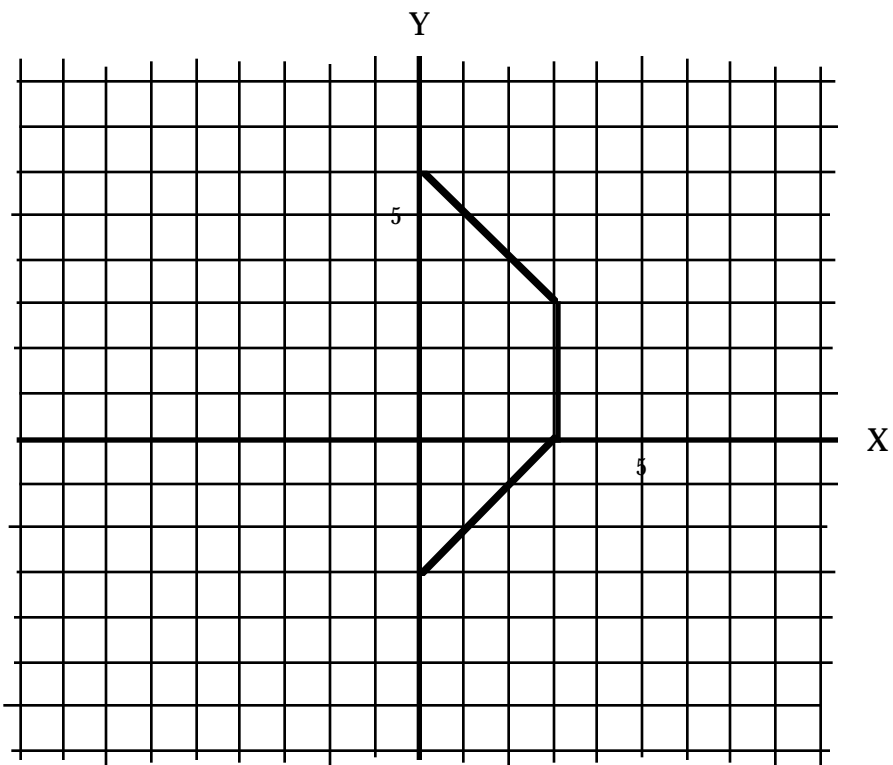
5)a) $y/2 = \sqrt{x}$, b) $-y = |x/2|$ or $-2y = |x|$, 6)a) $y/2 = |x|$,
b) $(y + 4)/2 = |x + 5|$, c) $x/2 = |y|$, 7)a)



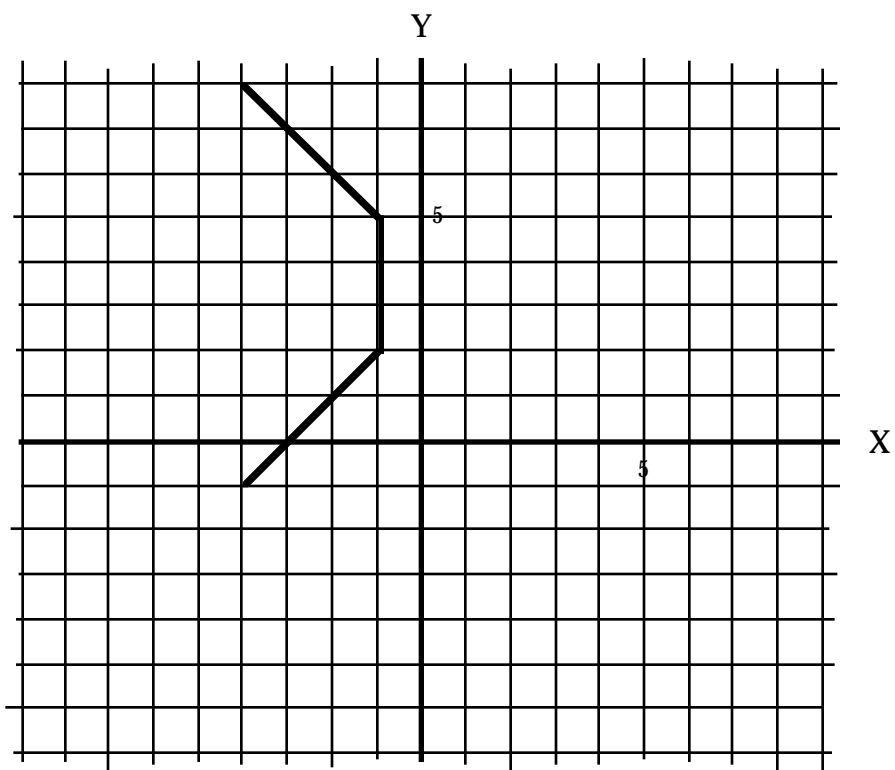
b)



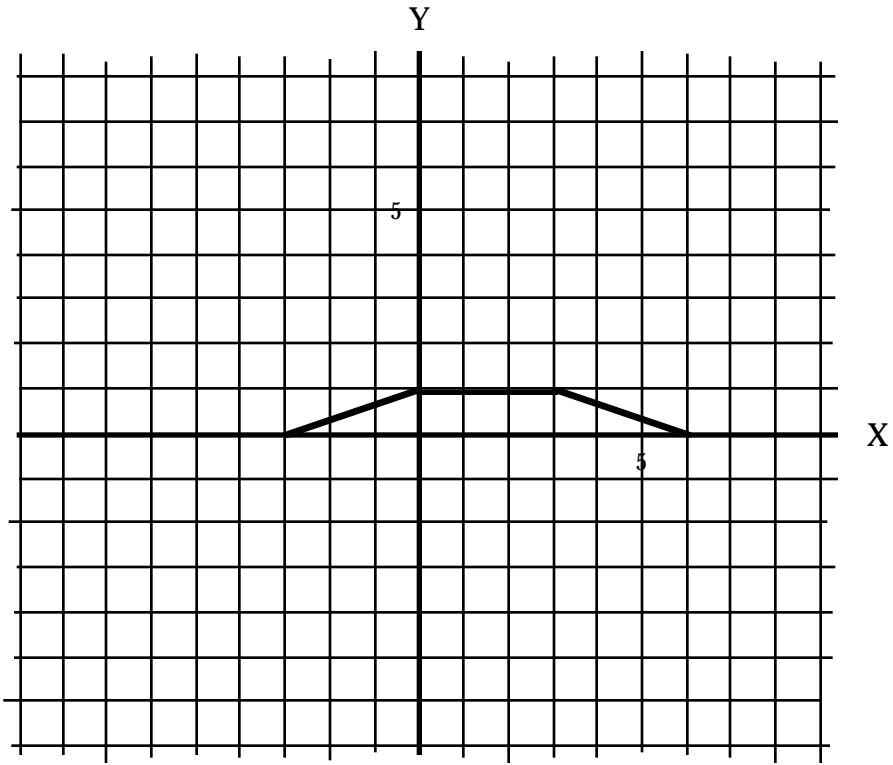
c)



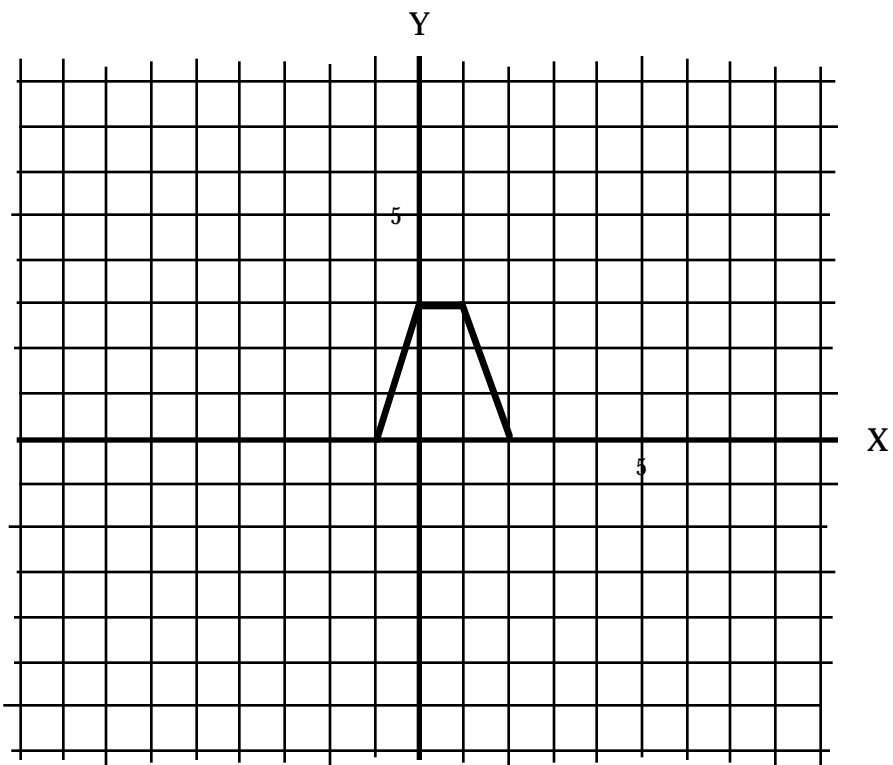
d)



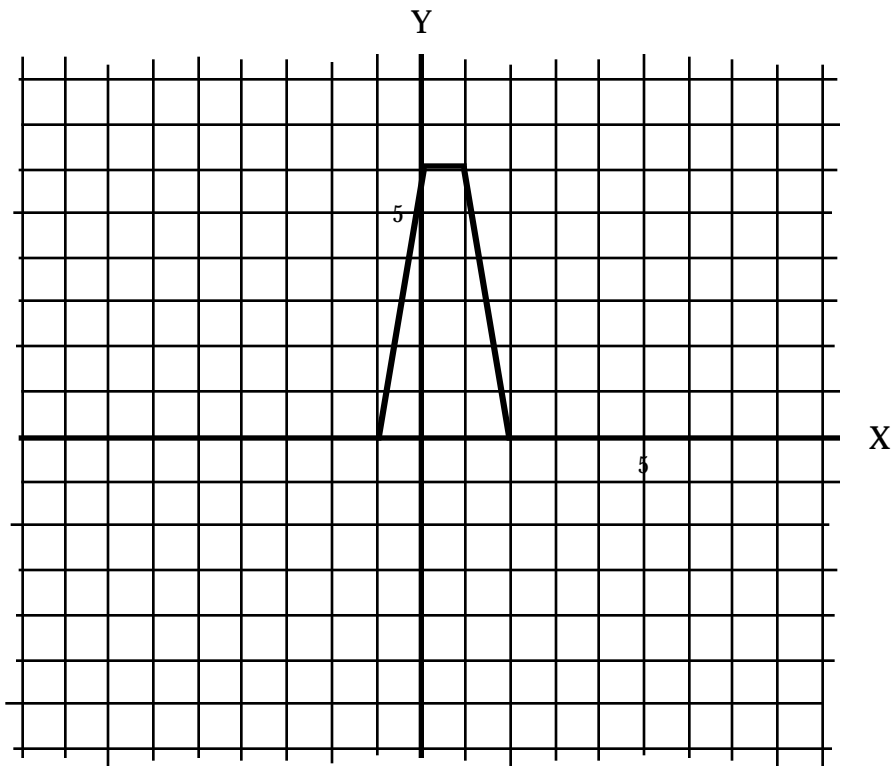
e)



f)



g)



h)

