Name:_____

1. The following graph is for the function $y = \dfrac{1}{x}$, use the grid to graph the functions below. Indicate the transformations required to reach the functions below:

   a) $y = \dfrac{1}{x+2} - 3$

   b) $y = \dfrac{1}{2x+3} + 1.5$
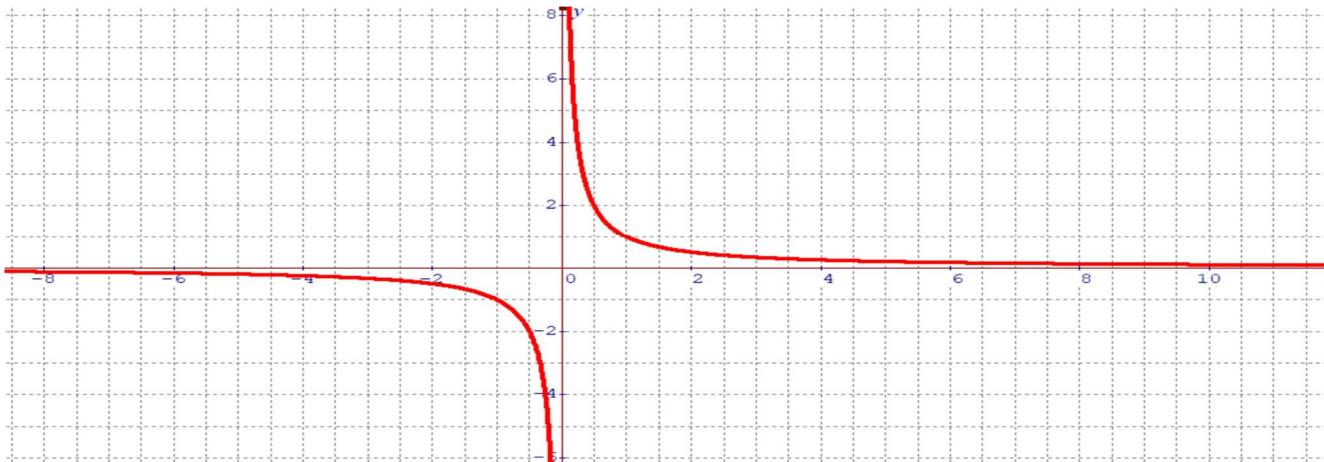
2. The following graph is for the function $y = |x|$, use the grid to graph the functions below. Indicate the transformations required to reach the functions below:

   a) $y = 2|3x - 4| - 1$

   b) $y = -2\left|\dfrac{x}{2} + 3\right| - 3$
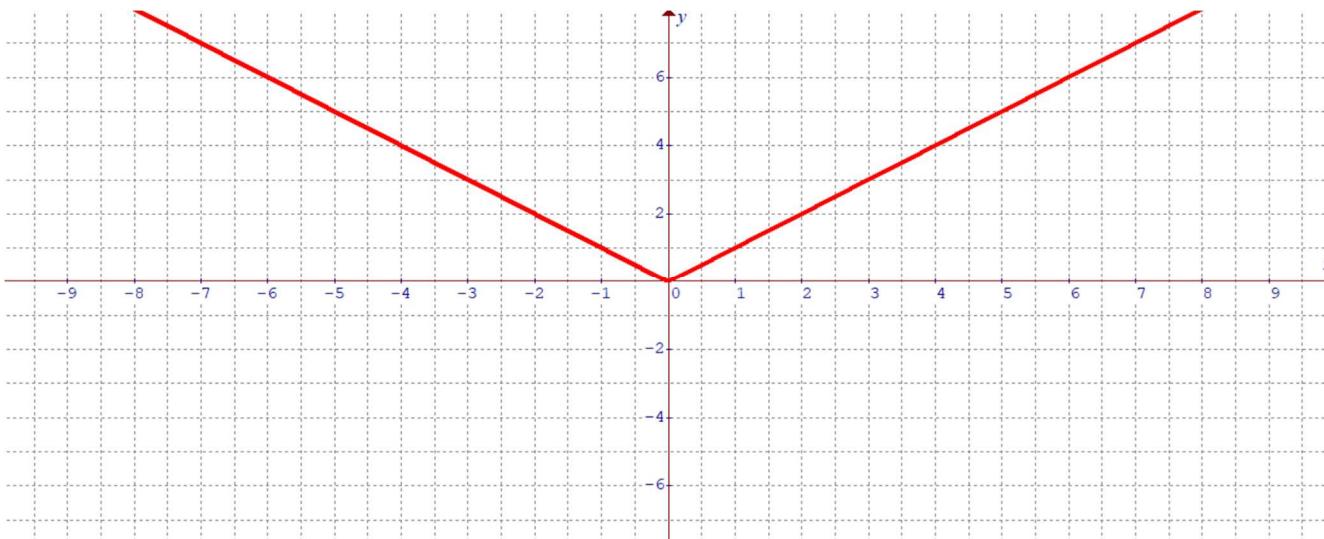
3. The following graph is for the function $x^2 + y^2 = 9$, use the grid to graph the functions below. Indicate the transformations required to reach the functions below:

a) $(x-3)^2 + (y+2)^2 = 9$

b) $\left(\dfrac{x}{2}-3\right)^2 + (2y+4)^2 = 9$
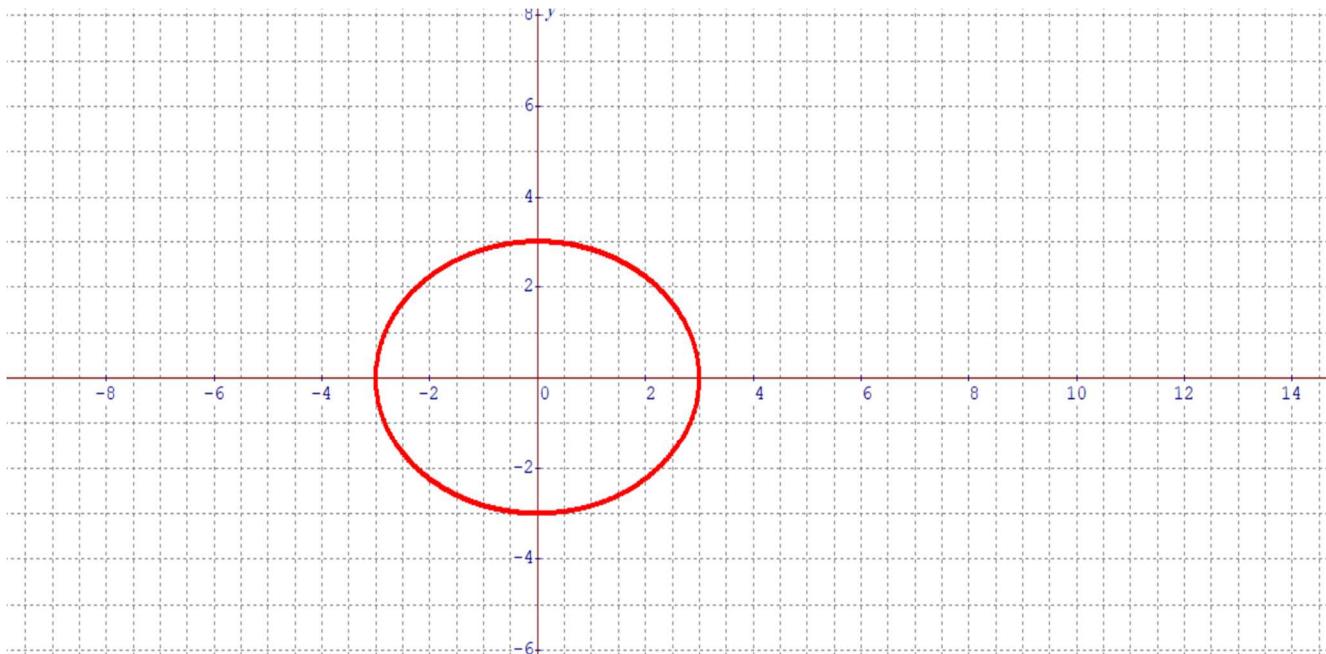
4. The following graph is for the function $y = \sin\dfrac{2\pi}{5}x$, use the grid to graph the functions below. Indicate the transformations required to reach the functions below:

a) $y = 3\sin\dfrac{2\pi}{5}(x-2)$

b) $y = -2\sin\dfrac{2\pi}{5}(x+3)+4$