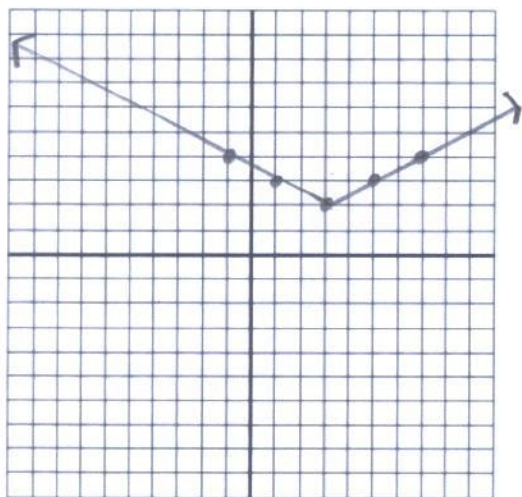


- 1) A tutor for the SAT charges an initial amount of \$10 for a session. In addition, the tutor charges \$50 an hour for up to and including 5 hours and \$75 an hour for over 5 hours. Write a piecewise function and that represents this scenarios.

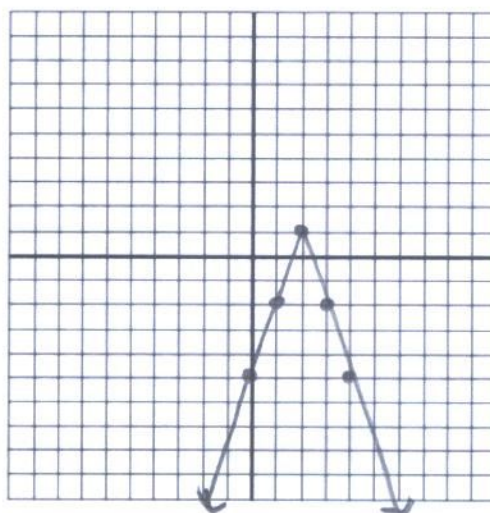
$$f(x) = \begin{cases} 50x + 10, & \text{if } 0 < x \leq 5 \\ 75x + 10, & \text{if } x > 5 \end{cases}$$

Graph the following:

2) $\frac{1}{2}|x-3|+2$ (3,2)

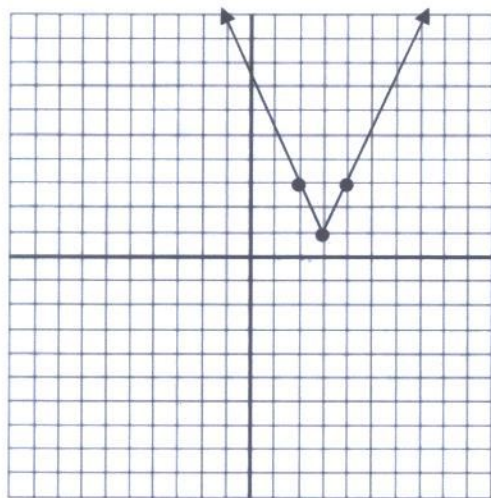


3) $-3|x-2|+1$ (2,1)



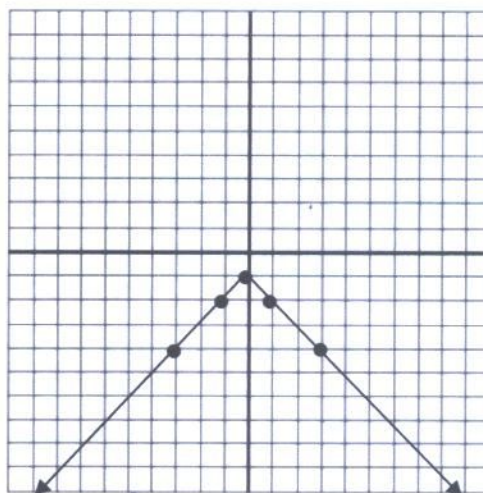
Write an equation for the following:

4) $f(x) = 2|x-3|+1$



(3,1) a=2

3) $f(x) = -|x|-1$



(0,-1) a=-1