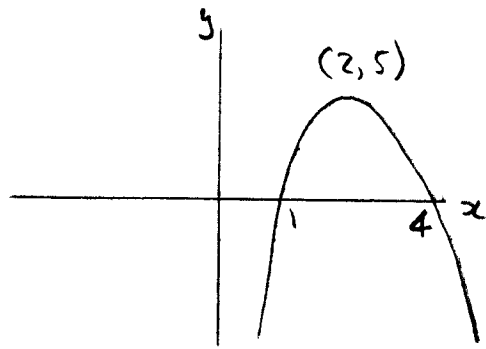


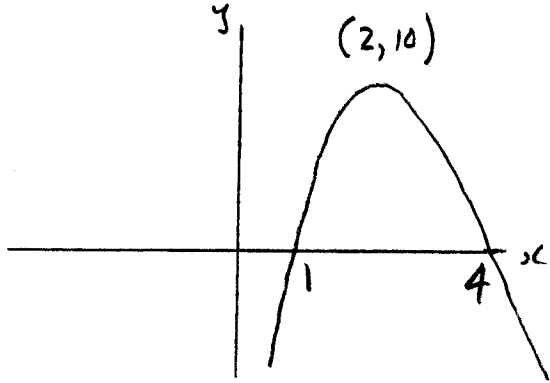
GRAPH TRANSFORMATIONS 2008-10

6)

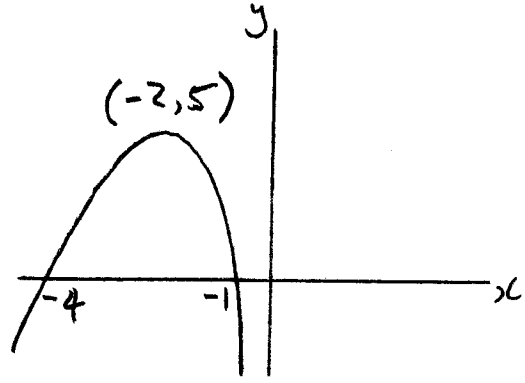
$y = f(x)$



a) $y = 2f(x)$



b) $y = f(-x)$



c) $y = f(x+a)$ $a = 2$
 $y = f(x+2)$ translates $y = f(x)$ by $\begin{pmatrix} -2 \\ 0 \end{pmatrix}$

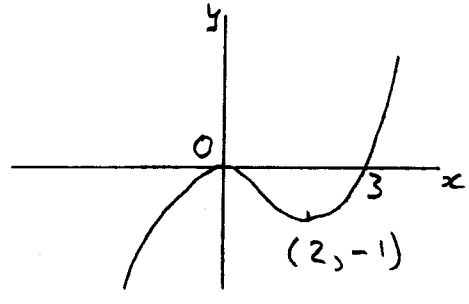
so maximum point would be on y-axis



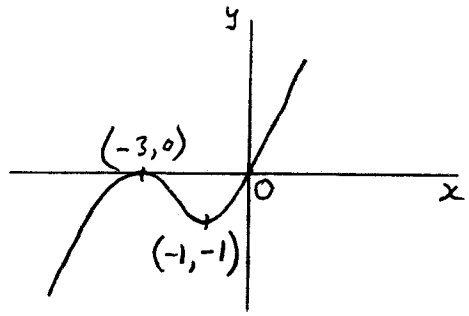
GRAPH TRANSFORMATIONS 2008-10

5)

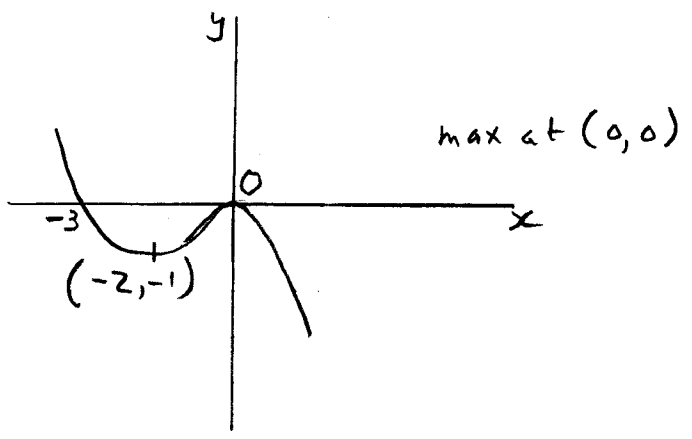
$y = f(x)$



a) $y = f(x+3)$

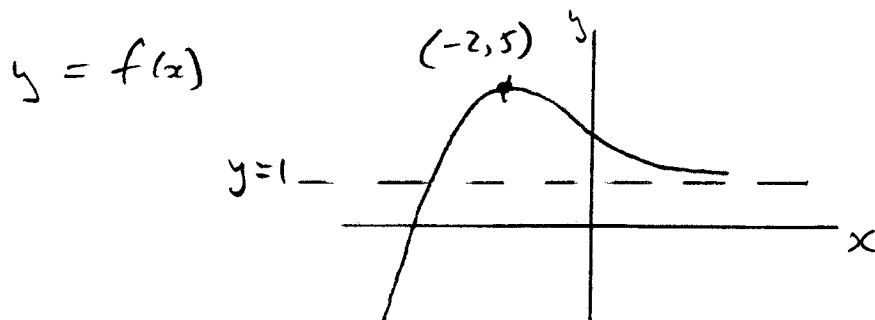


b) $y = f(-x)$

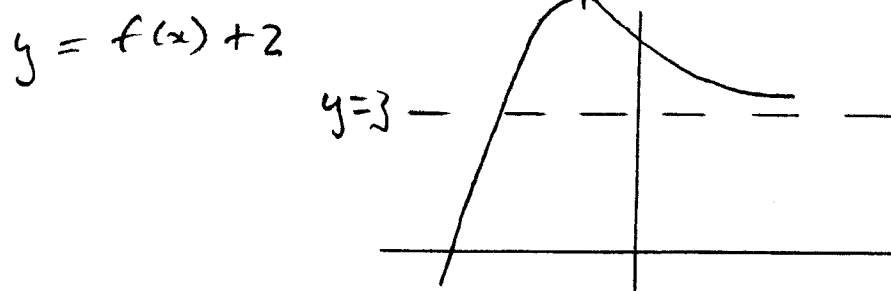


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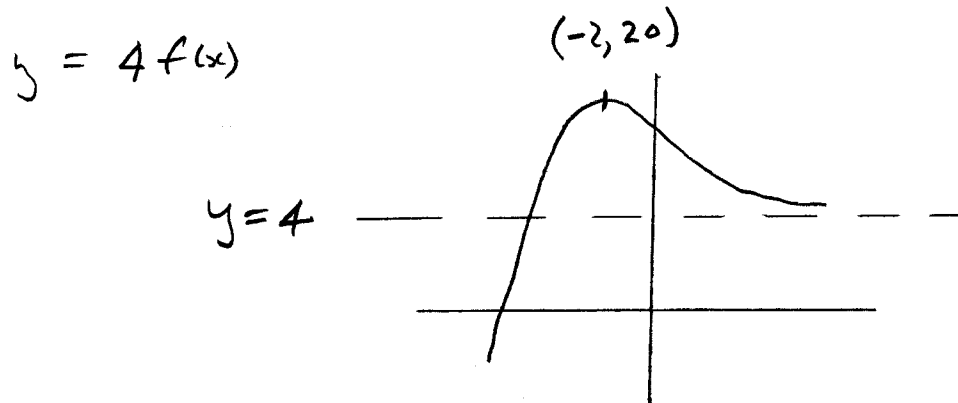
8)



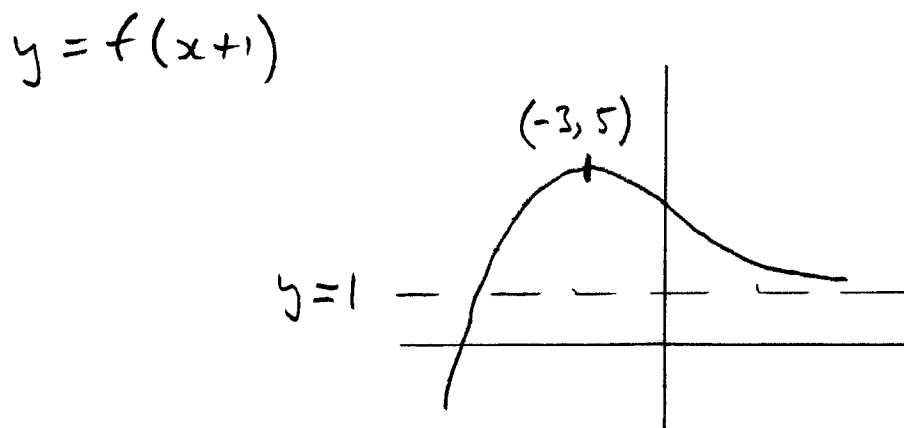
a)



b)



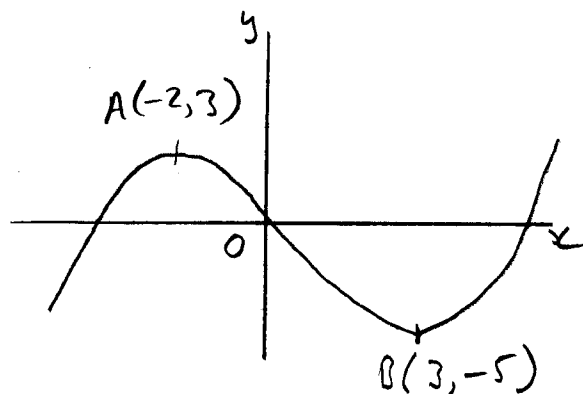
c)



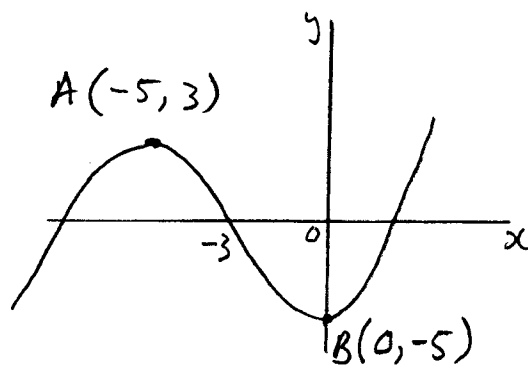
GRAPH TRANSFORMATIONS 2008-10

b)

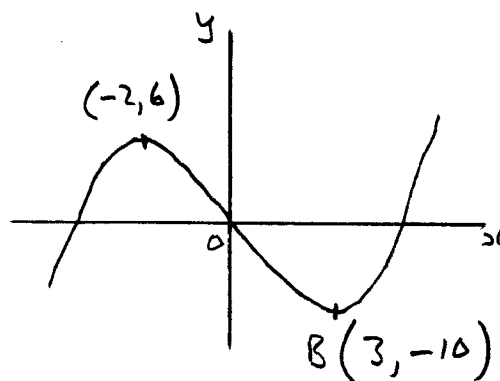
$$y = f(x)$$



a) $y = f(x+3)$



b) $y = 2f(x)$



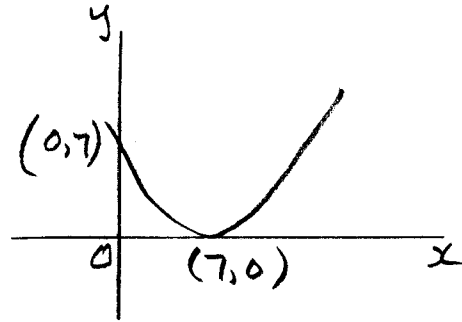
c) $a = 5$

$y = f(x) + 5$ translates $y = f(x)$ by $\begin{pmatrix} 0 \\ 5 \end{pmatrix}$
 lifting minimum 5 units onto x-axis at (3, 0)

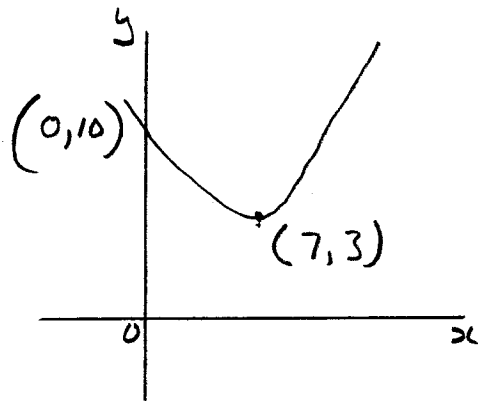
GRAPH TRANSFORMATIONS 2008-10

3)

$$y = f(x)$$



a) $y = f(x) + 3$



b) $y = f(2x)$

