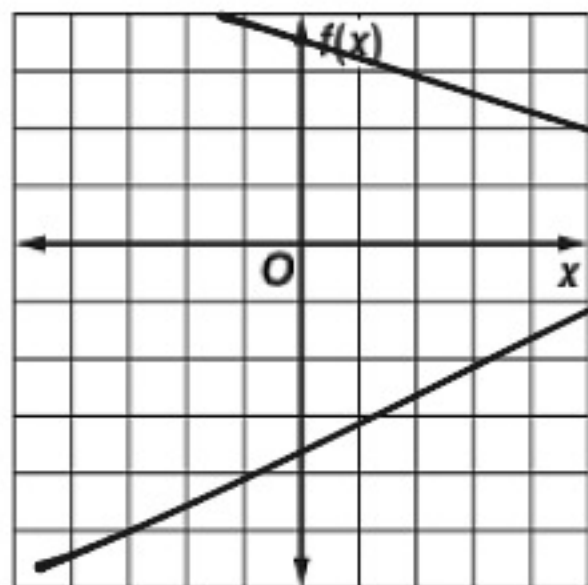
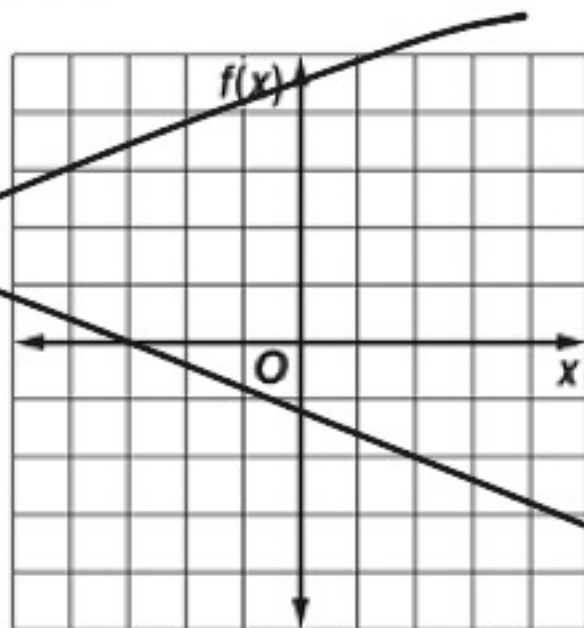


Graph each function.

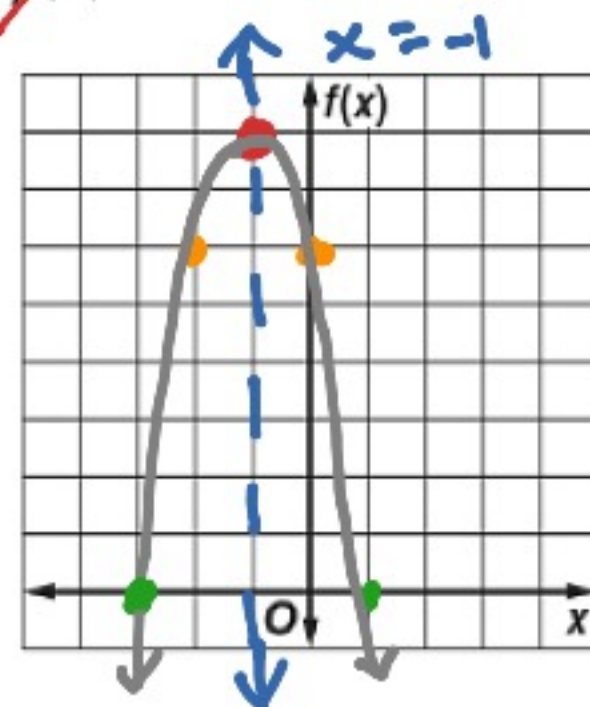
10. $f(x) = -x^2 - 2x + 2$



11. $f(x) = 2x^2 + 4x - 2$



12. $f(x) = -2x^2 - 4x + 6$



Ans: $x = \frac{-b}{2a} = \frac{-(-4)}{2(-2)} = \frac{4}{-4} = -1$

$x = -1$

Vertex:

$$\begin{aligned} y &= -2(-1)^2 - 4(-1) + 6 \\ &= -2 + 4 + 6 \\ &= 8 \end{aligned}$$

$(-1, 8)$

x	y
-2	$-2(-2)^2 - 4(-2) + 6$ $= -8 + 8 + 6 = 6$ $(-2, 6)$
1	$-2(1)^2 - 4(1) + 6$ $= -2 - 4 + 6 = 0$