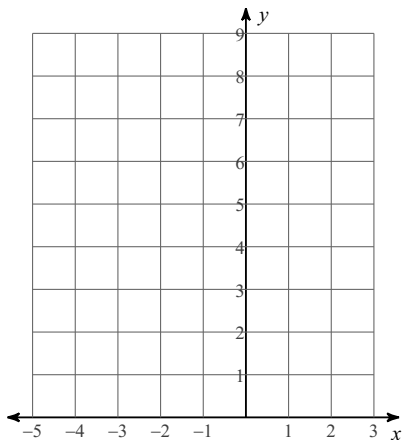


Quadratics in Vertex Form - Practice

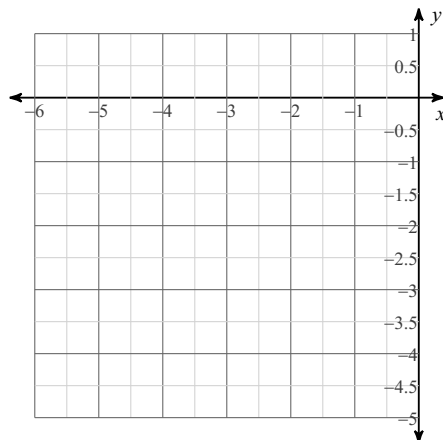
Sketch the graph of each function. USE PENCIL ONLY!!

If you need help, use a graphing calculator, or go to [desmos.com](https://www.desmos.com) on a computer.

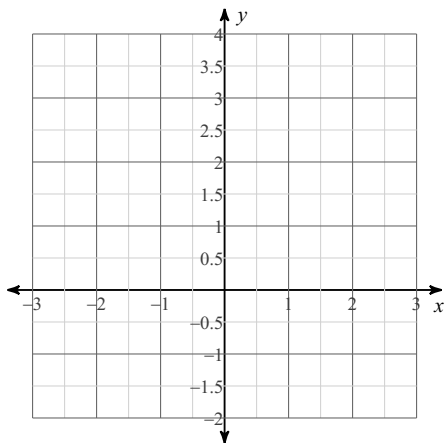
1) $f(x) = (x + 3)^2 + 4$



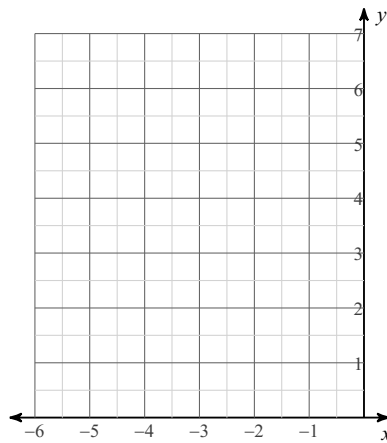
2) $f(x) = (x + 2)^2 - 4$



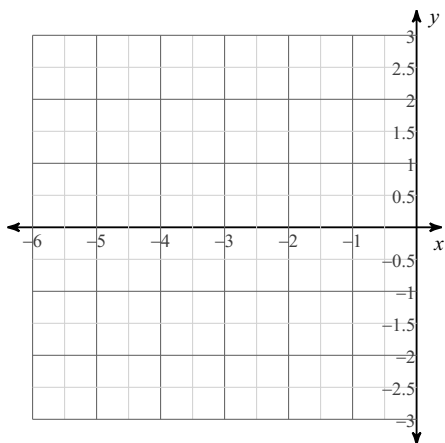
3) $f(x) = (x + 1)^2 - 1$



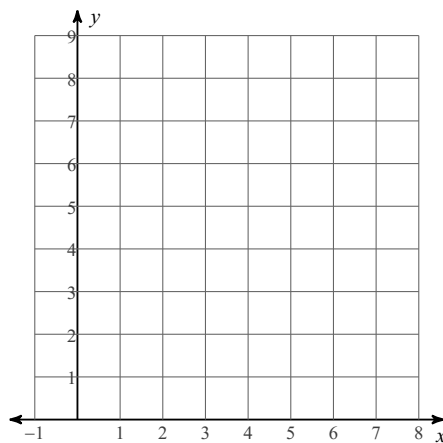
4) $f(x) = (x + 3)^2 + 2$



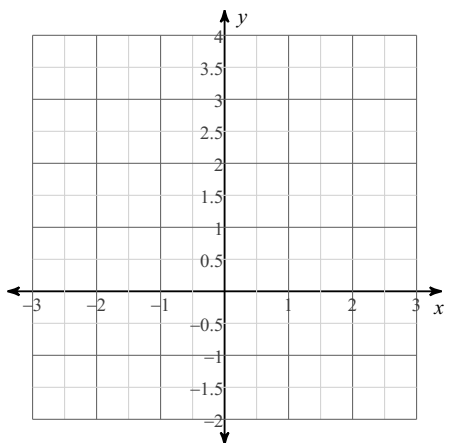
5) $f(x) = -(x + 2)^2 + 2$



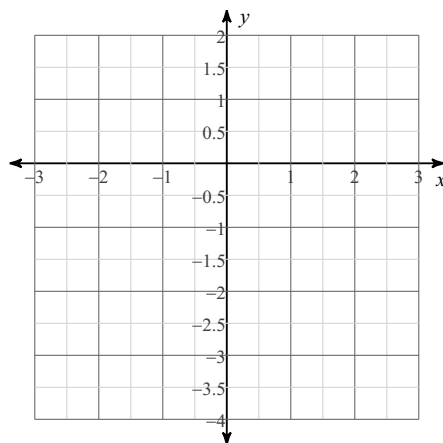
6) $f(x) = (x - 4)^2 + 4$



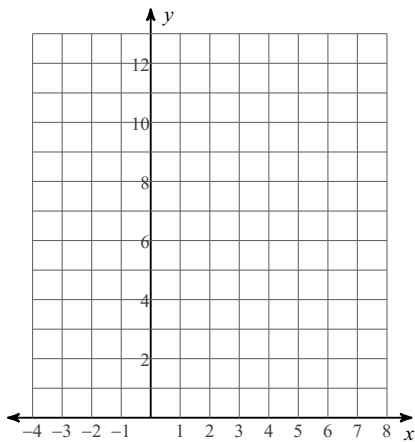
$$7) f(x) = (x - 1)^2 - 1$$



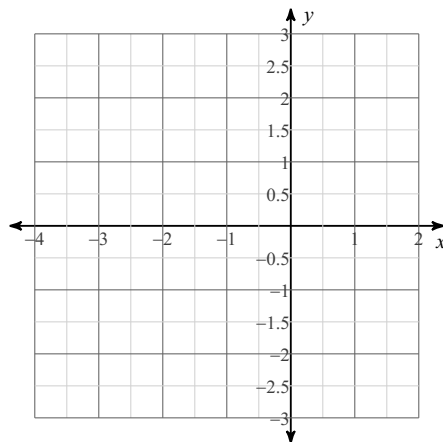
$$8) f(x) = -(x + 1)^2 + 1$$



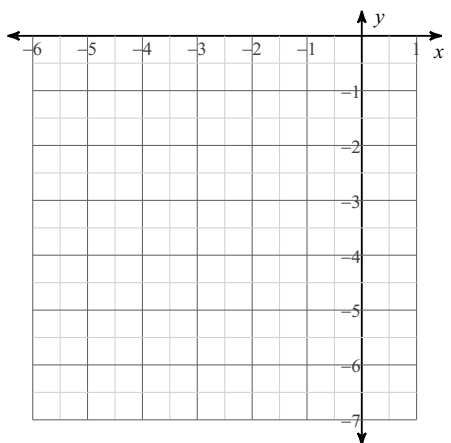
$$9) f(x) = 2(x - 3)^2 + 4$$



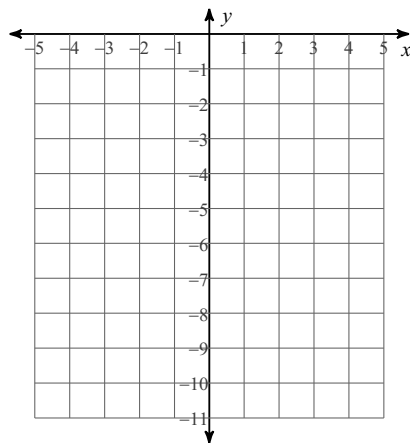
$$10) f(x) = -(x + 2)^2 + 2$$



$$11) f(x) = -\frac{1}{2}(x + 4)^2 - 4$$



$$12) f(x) = -2(x - 3)^2 - 2$$

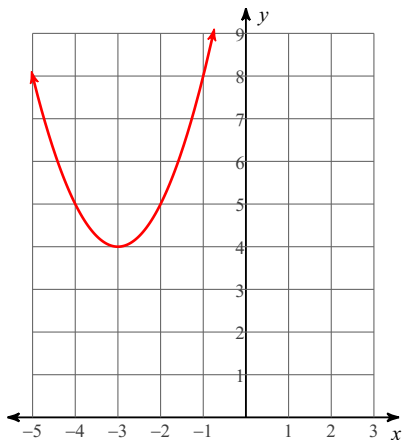


Quadratics in Vertex Form - Practice

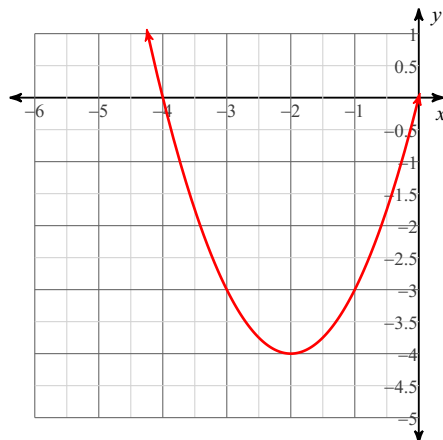
Sketch the graph of each function. USE PENCIL ONLY!!

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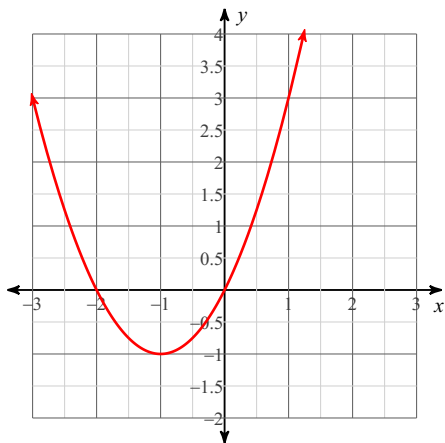
1) $f(x) = (x + 3)^2 + 4$



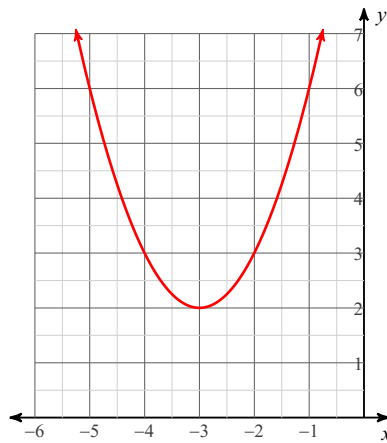
2) $f(x) = (x + 2)^2 - 4$



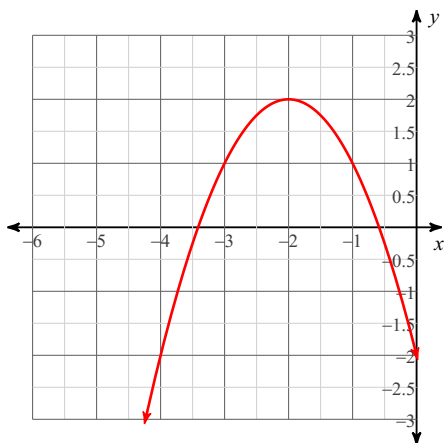
3) $f(x) = (x + 1)^2 - 1$



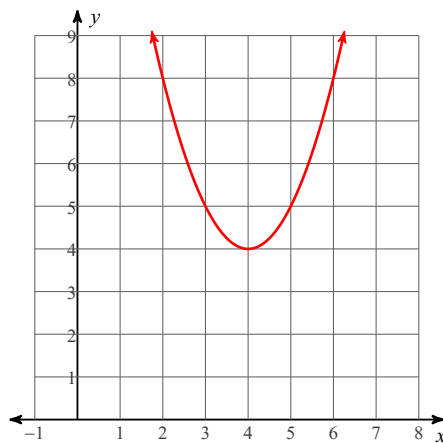
4) $f(x) = (x + 3)^2 + 2$



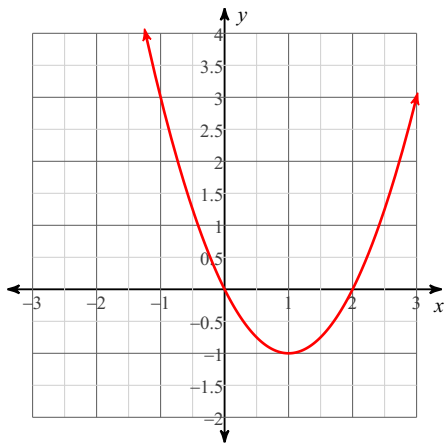
5) $f(x) = -(x + 2)^2 + 2$



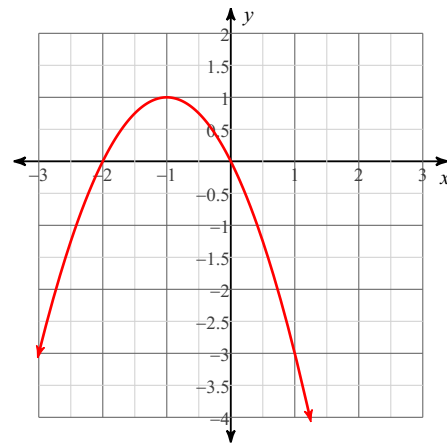
6) $f(x) = (x - 4)^2 + 4$



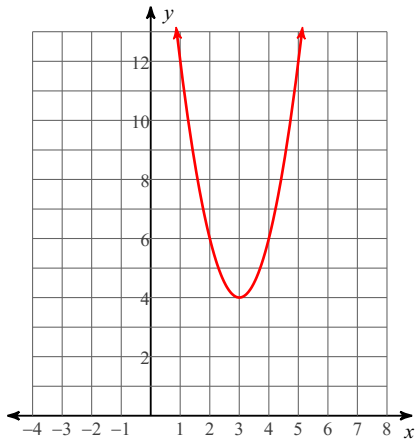
$$7) f(x) = (x - 1)^2 - 1$$



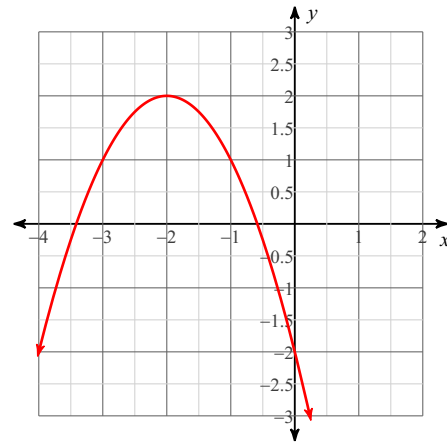
$$8) f(x) = -(x + 1)^2 + 1$$



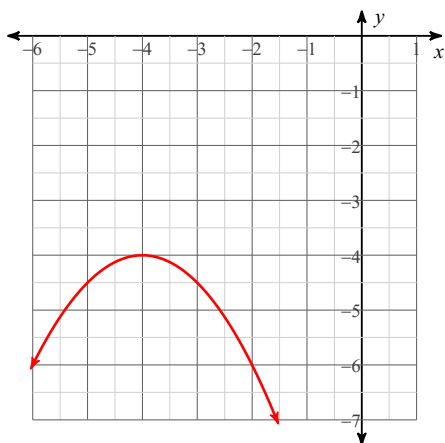
$$9) f(x) = 2(x - 3)^2 + 4$$



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



$$11) f(x) = -\frac{1}{2}(x + 4)^2 - 4$$



$$12) f(x) = -2(x - 3)^2 - 2$$

