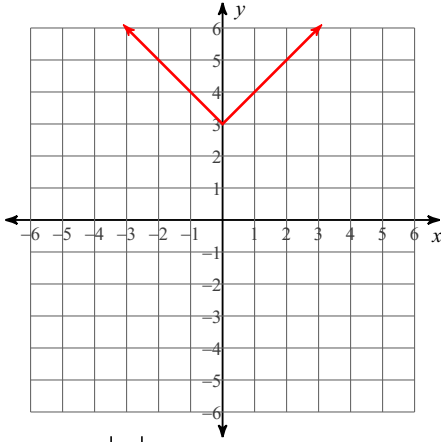


Assignment

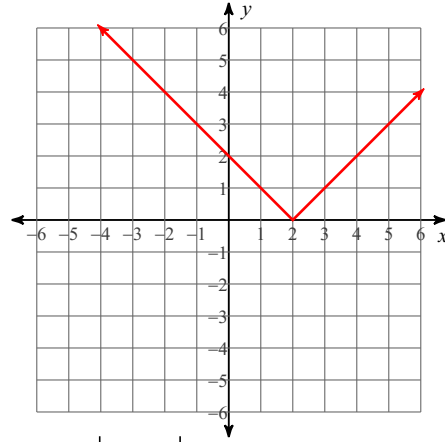
Date _____ Period _____

Graph each equation.

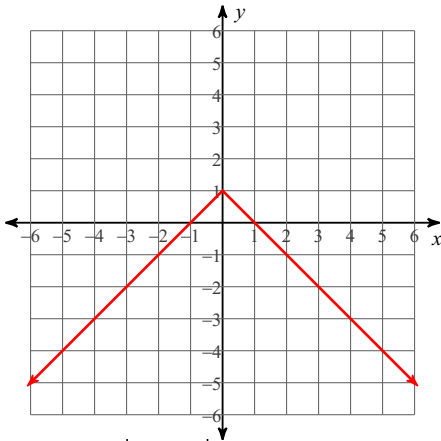
1) $y = |x| + 3$



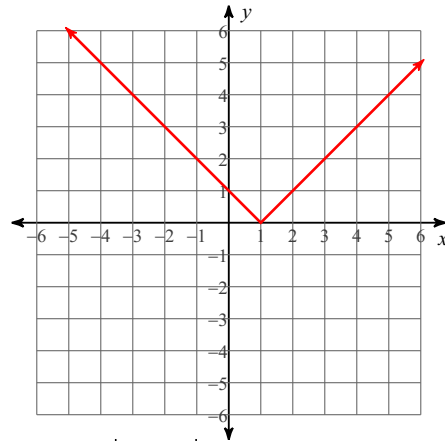
2) $y = |x - 2|$



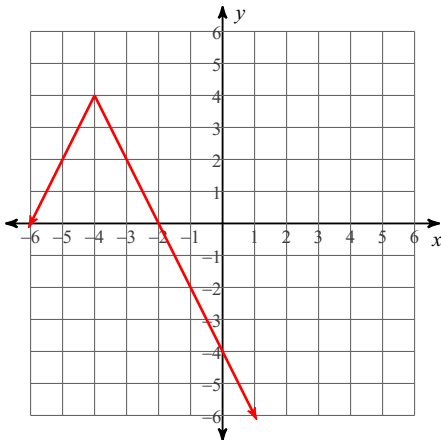
3) $y = -|x| + 1$



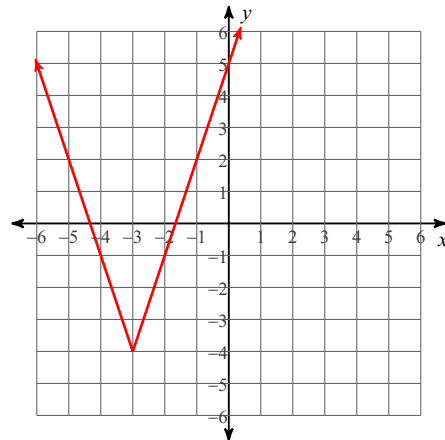
4) $y = |x - 1|$



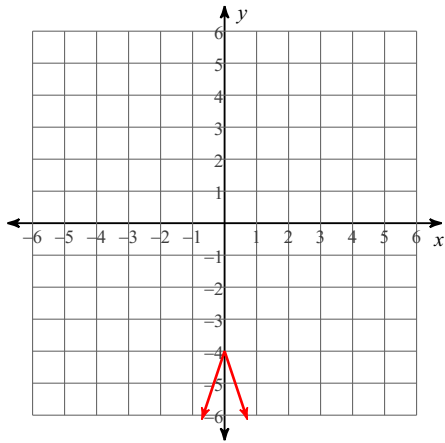
5) $y = -2|x + 4| + 4$



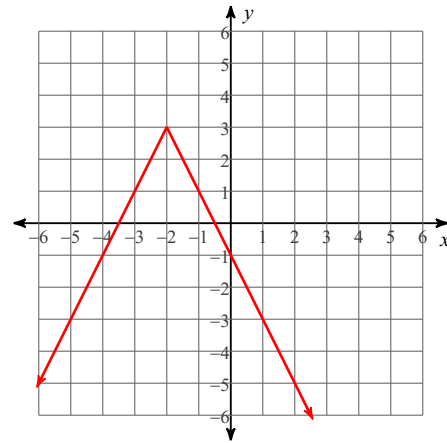
6) $y = 3|x + 3| - 4$



7) $y = -3|x| - 4$

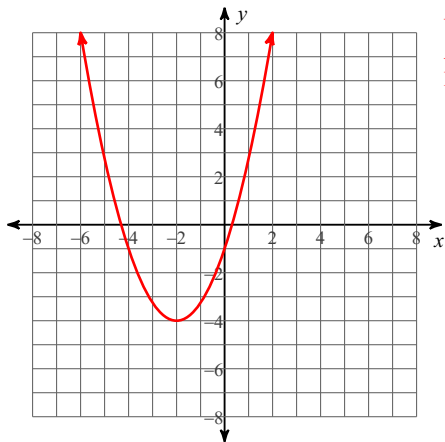


8) $y = -2|x + 2| + 3$



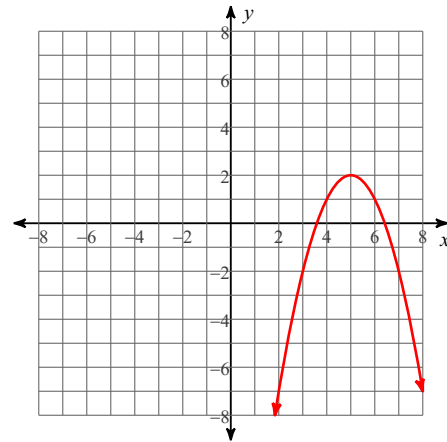
Identify the vertex, axis of symmetry, and min/max value of each. Then sketch the graph.

9) $y = \frac{3}{4}(x + 2)^2 - 4$



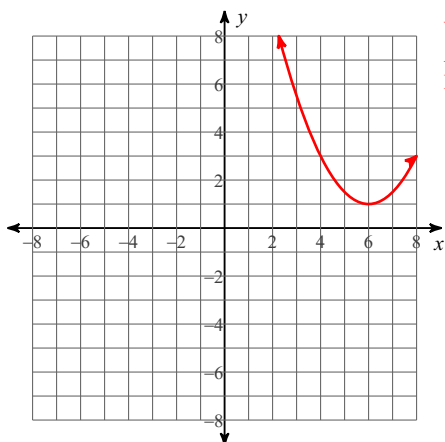
Vertex: $(-2, -4)$
 Axis of Sym.: $x = -2$
 Min value = -4

10) $y = -(x - 5)^2 + 2$



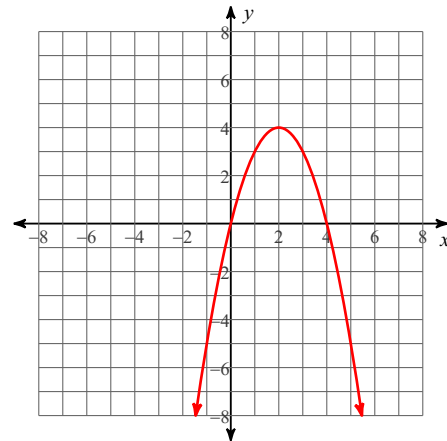
Vertex: $(5, 2)$
 Axis of Sym.: $x = 5$
 Max value = 2

11) $y = \frac{1}{2}(x - 6)^2 + 1$



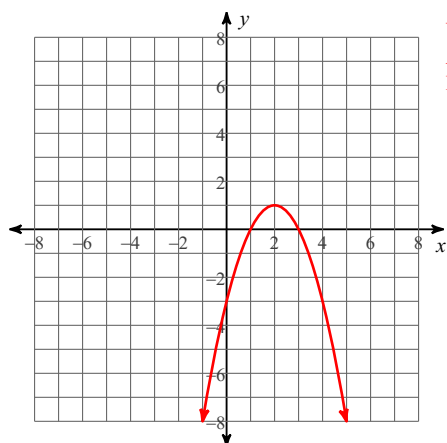
Vertex: $(6, 1)$
 Axis of Sym.: $x = 6$
 Min value = 1

12) $y = -(x - 2)^2 + 4$



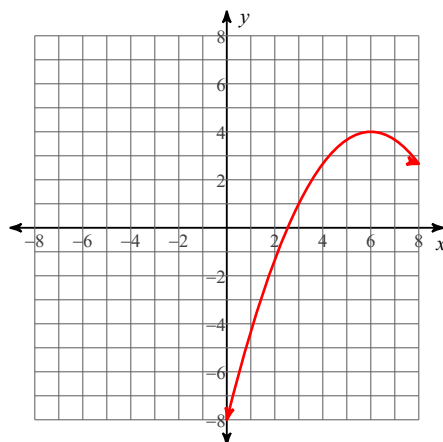
Vertex: $(2, 4)$
 Axis of Sym.: $x = 2$
 Max value = 4

13) $y = -(x - 2)^2 + 1$



Vertex: (2, 1)
Axis of Sym.: $x = 2$
Max value = 1

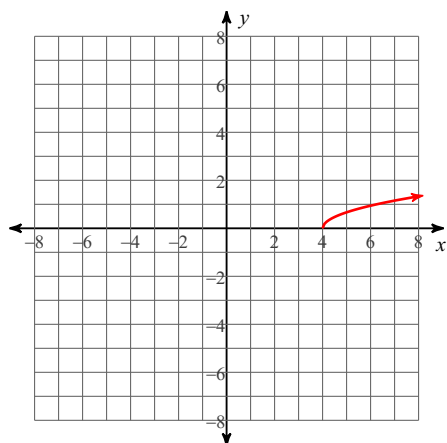
14) $y = -\frac{1}{3}(x - 6)^2 + 4$



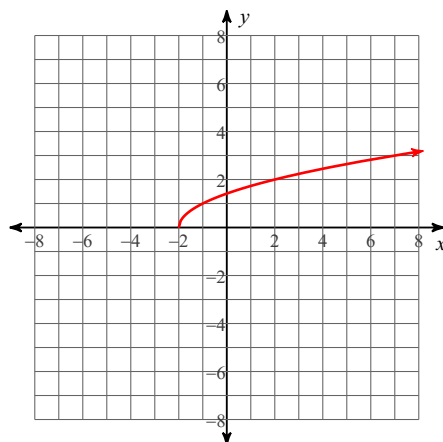
Vertex: (6, 4)
Axis of Sym.: $x = 6$
Max value = 4

Sketch the graph of each function.

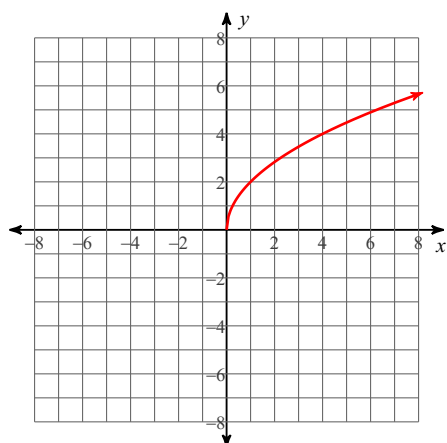
15) $y = \frac{2}{3}\sqrt{x - 4}$



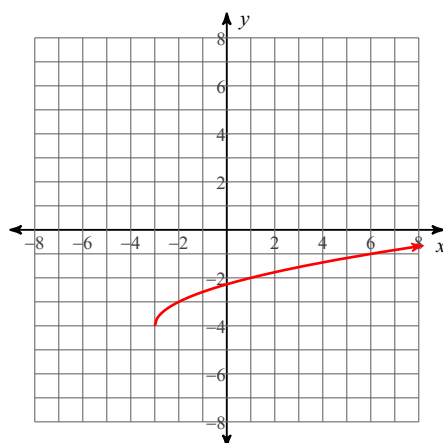
16) $y = \sqrt{x + 2}$



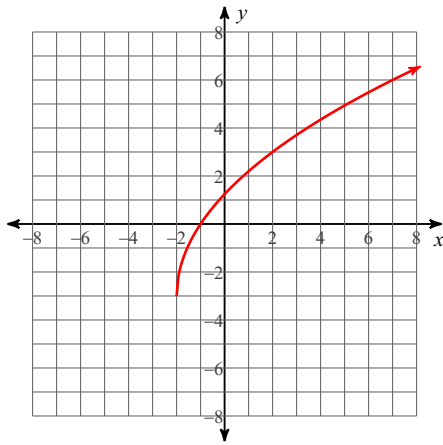
17) $y = \sqrt{4x}$



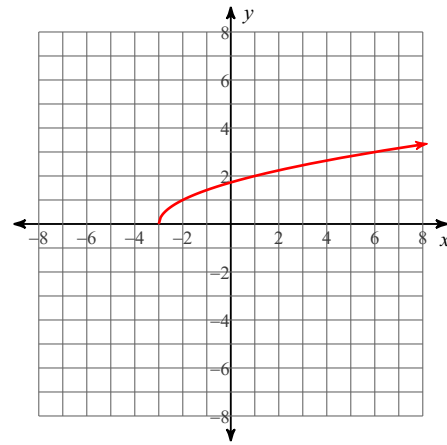
18) $y = \sqrt{x + 3} - 4$



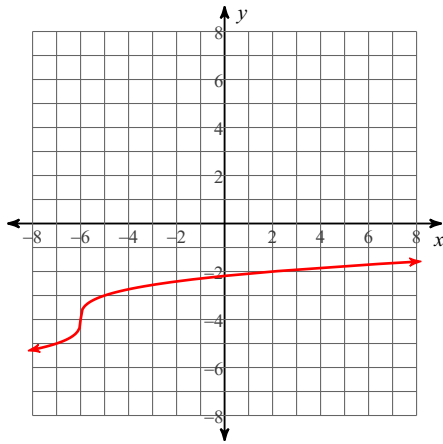
$$19) y = -3 + \sqrt{9x + 18}$$



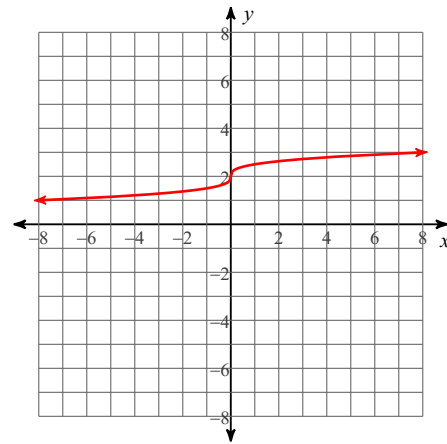
$$20) y = \sqrt{x + 3}$$



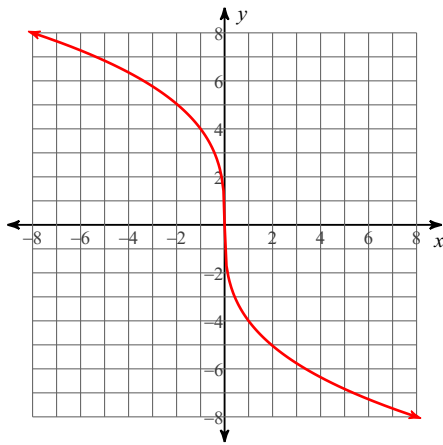
$$21) y = -4 + \sqrt[3]{x + 6}$$



$$22) y = \frac{1}{2}\sqrt[3]{x} + 2$$



$$23) y = -4\sqrt[3]{x}$$



$$24) y = 3 + 2\sqrt[3]{x}$$

