

Graphing Functions

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Date _____

Identify the vertex of each. Then sketch the graph.

1) $f(x) = -(x - 6)^2 - 2$

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

5) $f(x) = \frac{4}{5}(x - 5)^2 - 1$

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

9) $f(x) = \frac{1}{4}(x - 2)^2 - 3$

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

4) $f(x) = -\frac{1}{4}(x - 3)^2 - 3$

6) $f(x) = 3(x - 6)^2 - 4$

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

10) $f(x) = \frac{1}{4}(x + 6)^2 - 2$

Sketch the graph of each function.

11) $y = -4 - \frac{1}{2} \cdot \sqrt{x - 4}$

13) $y = \frac{2}{3} \cdot \sqrt{x + 2} + 4$

15) $y = \sqrt{9x - 9} - 1$

17) $y = -3 + \frac{1}{2} \cdot \sqrt{x - 1}$

19) $y = 2 - 3\sqrt{x + 4}$

12) $y = -3\sqrt{x + 4} + 5$

14) $y = 2\sqrt{x + 4} - 4$

16) $y = 2\sqrt{x - 1} + 2$

18) $y = -5 + \sqrt{9x + 9}$

20) $y = -5 + 4\sqrt{x - 4}$

Graph each equation.

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

23) $y = 2|2x + 4|$

25) $y = 2|3x - 4| + 2$

27) $y = 3|2x + 4| - 4$

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

22) $y = 3|-2x + 1| + 4$

24) $y = 3|2x| - 2$

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

28) $y = 2|3x| - 2$

30) $y = 3|3x + 2|$

Graph each function.

31) $f(x) = -\frac{1}{x - 2} - 1$

33) $f(x) = \frac{2}{x} - 1$

35) $f(x) = \frac{2}{x - 1} + 1$

37) $f(x) = -\frac{4}{x - 2} + 2$

39) $f(x) = \frac{2}{x + 3} + 3$

32) $f(x) = -\frac{4}{x + 2} - 2$

34) $f(x) = \frac{3}{x + 2} - 2$

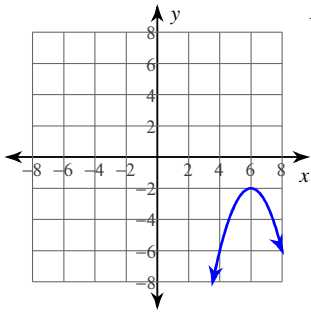
36) $f(x) = -\frac{1}{x}$

38) $f(x) = \frac{1}{x + 3} + 2$

40) $f(x) = \frac{2}{x + 3} - 3$

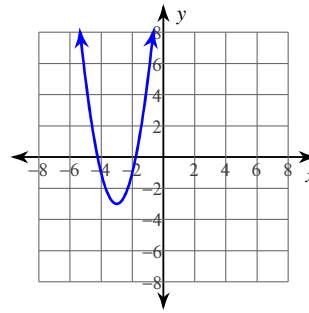
Answers to Graphing Functions (ID: 1)

1)



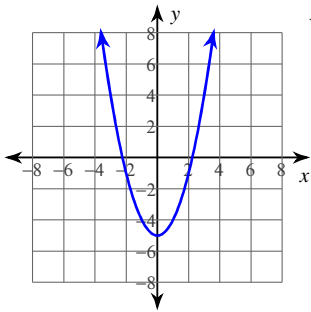
Vertex: (6, -2)

2)



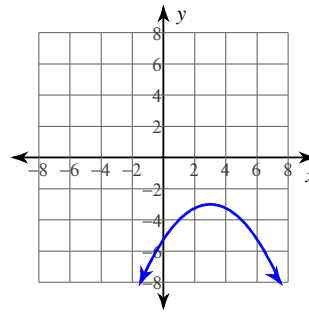
Vertex: (-3, -3)

3)



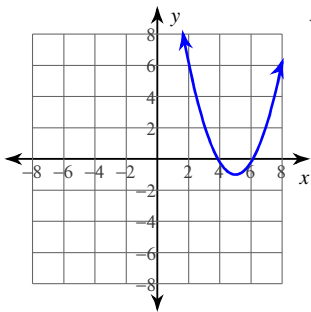
Vertex: (0, -5)

4)



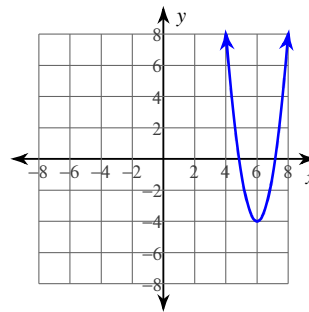
Vertex: (3, -3)

5)



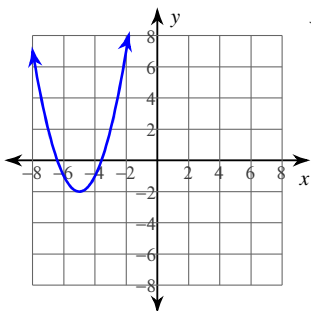
Vertex: (5, -1)

6)



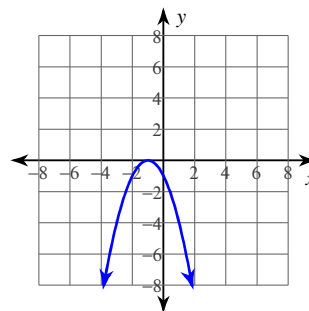
Vertex: (6, -4)

7)



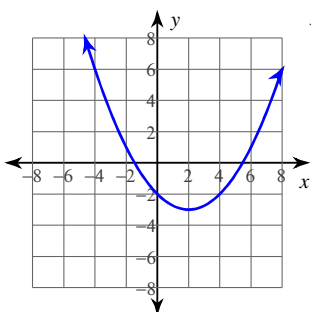
Vertex: (-5, -2)

8)



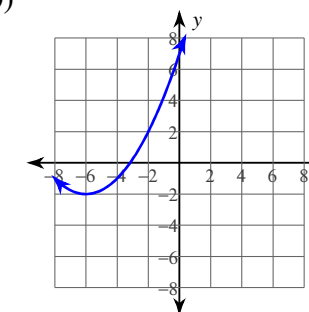
Vertex: (-1, 0)

9)



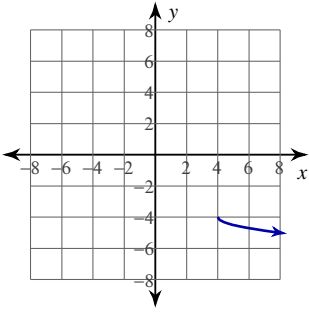
Vertex: (2, -3)

10)

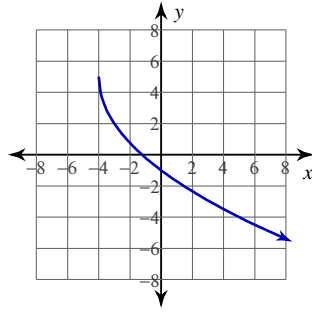


Vertex: (-6, -2)

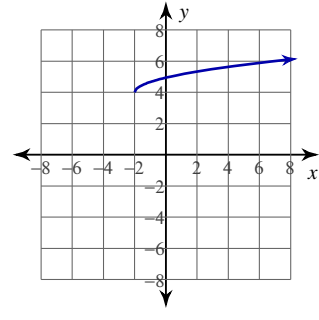
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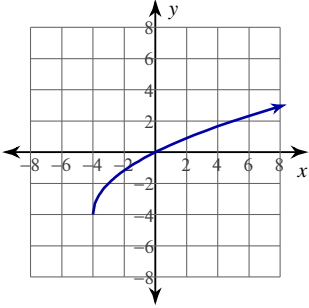
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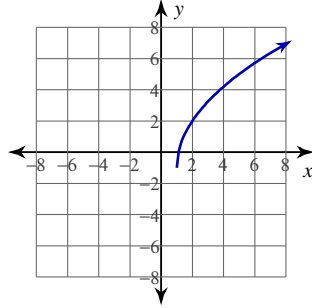
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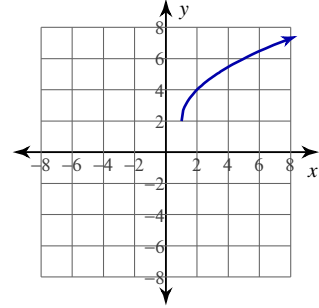
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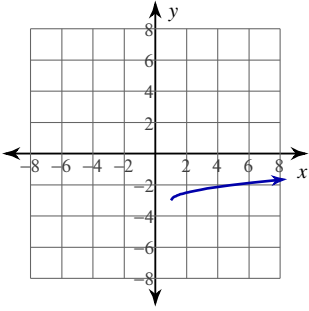
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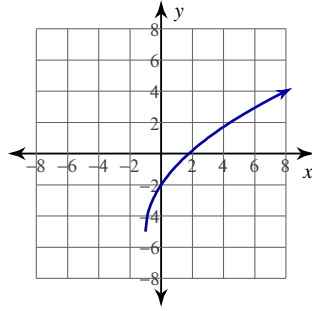
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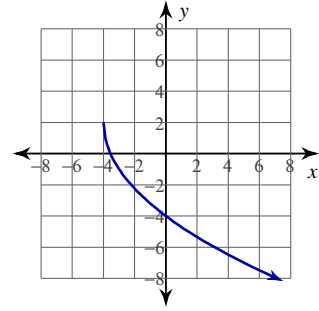
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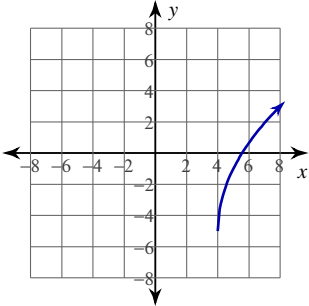
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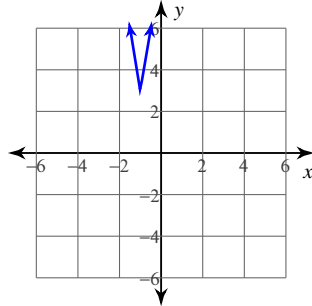
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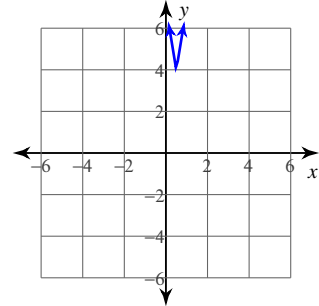
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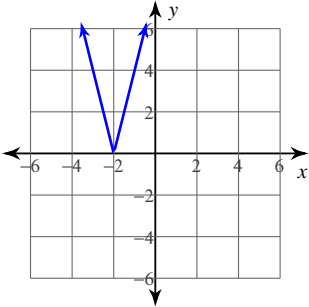
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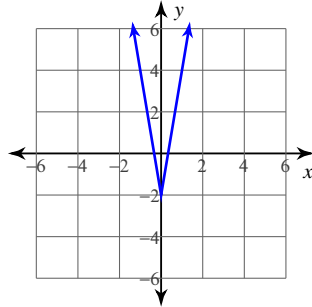
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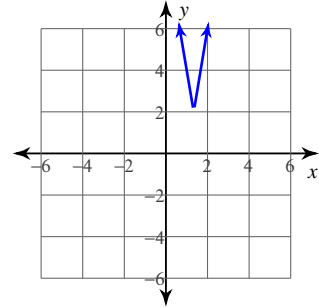
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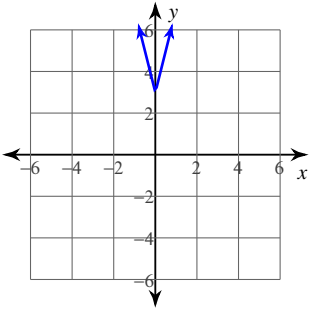
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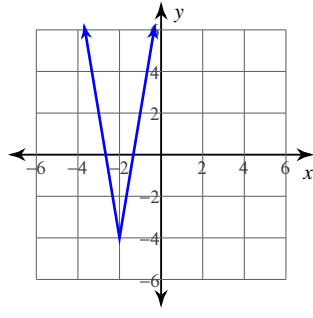
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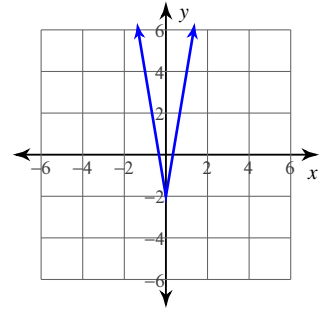
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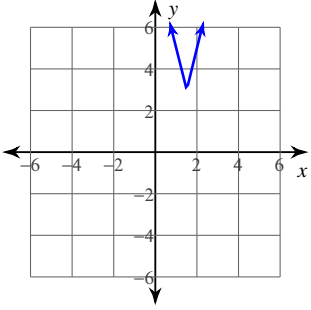
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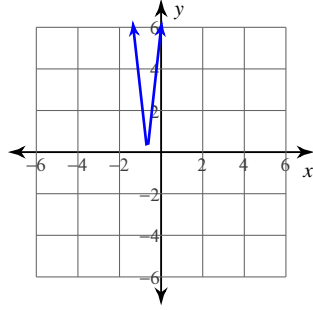
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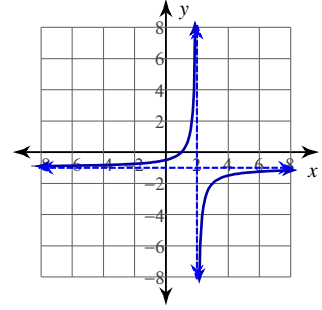
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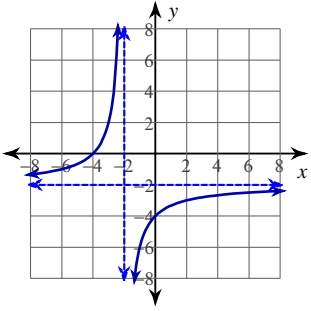
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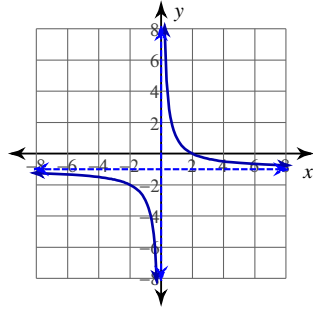
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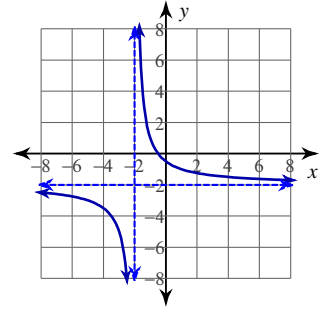
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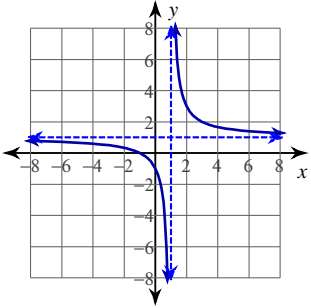
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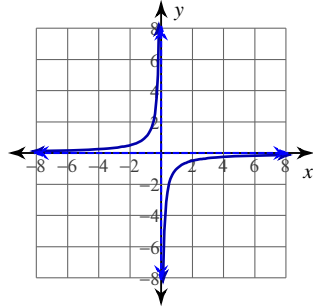
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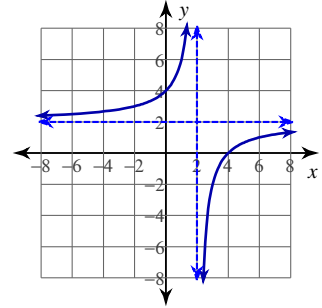
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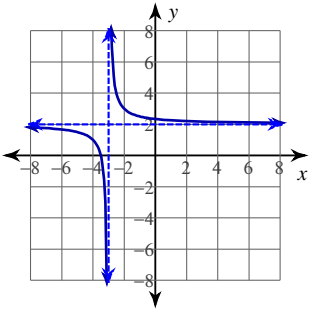
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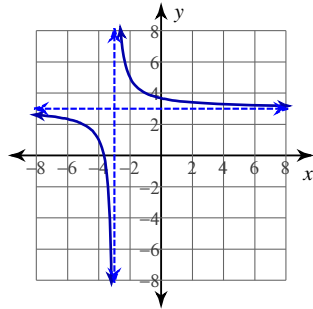
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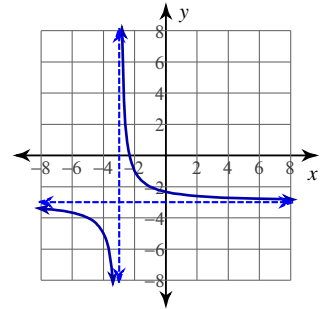
38)



39)



40)



Graphing Functions

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Date _____

Identify the vertex of each. Then sketch the graph.

$$1) f(x) = \frac{3}{7}(x+2)^2 - 4$$

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

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

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

$$5) f(x) = -2(x-6)^2 - 4$$

$$6) f(x) = -2(x+3)^2 - 3$$

$$7) f(x) = -(x-4)^2 + 4$$

$$8) f(x) = (x+2)^2 - 3$$

$$9) f(x) = (x-5)^2 - 4$$

$$10) f(x) = -\frac{1}{2}(x+6)^2 + 1$$

Sketch the graph of each function.

$$11) y = 2\sqrt{x+4} + 1$$

$$12) y = 2\sqrt{x+1} - 1$$

$$13) y = 2\sqrt{x+1} - 3$$

$$14) y = \frac{2}{5} \cdot \sqrt{x+5} - 5$$

$$15) y = 4\sqrt{x-2} - 1$$

$$16) y = -1 - 2\sqrt{x+2}$$

$$17) y = 5\sqrt{x-4} - 5$$

$$18) y = 2\sqrt{x-4} + 4$$

$$19) y = -3\sqrt{x+6} + 5$$

$$20) y = \frac{1}{2} \cdot \sqrt{x+6} + 3$$

Graph each equation.

$$21) y = -2|3x-1| - 3$$

$$22) y = -2|2x-1|$$

$$23) y = -2|2x+3|$$

$$24) y = -3|2x-4| + 1$$

$$25) y = -3|3x| + 4$$

$$26) y = -3|2x| + 2$$

$$27) y = -2|3x-3| + 1$$

$$28) y = 3|2x+2| + 2$$

$$29) y = -2|2x| + 3$$

$$30) y = -3|2x-4| - 3$$

Graph each function.

$$31) f(x) = -\frac{2}{x-1}$$

$$32) f(x) = -\frac{3}{x-1} + 2$$

$$33) f(x) = -\frac{3}{x+2}$$

$$34) f(x) = -\frac{2}{x-1} + 1$$

$$35) f(x) = -\frac{4}{x-2} + 1$$

$$36) f(x) = -\frac{3}{x-2} + 1$$

$$37) f(x) = -\frac{1}{x} + 2$$

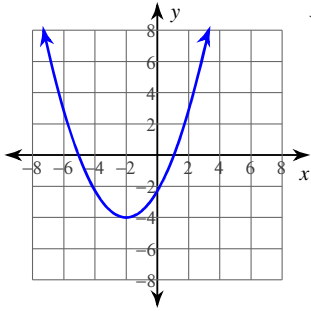
$$38) f(x) = -\frac{2}{x+3} - 3$$

$$39) f(x) = -\frac{1}{x+2} + 3$$

$$40) f(x) = -\frac{3}{x-2} + 2$$

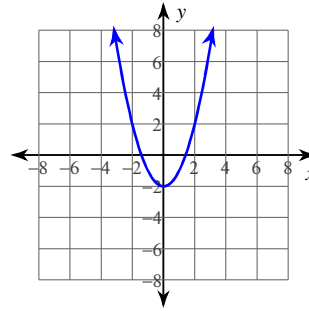
Answers to Graphing Functions (ID: 2)

1)



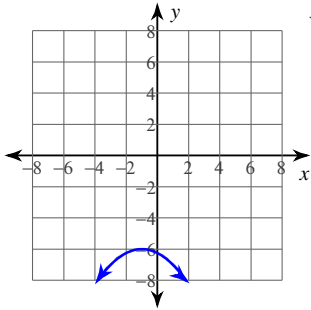
Vertex: $(-2, -4)$

2)



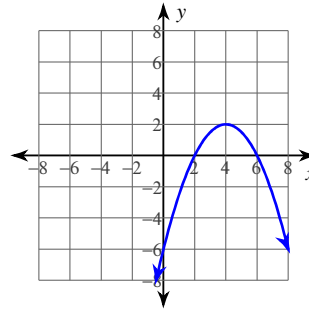
Vertex: $(0, -2)$

3)



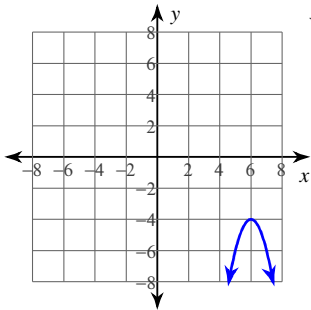
Vertex: $(-1, -6)$

4)



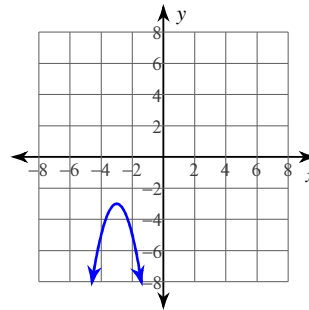
Vertex: $(4, 2)$

5)



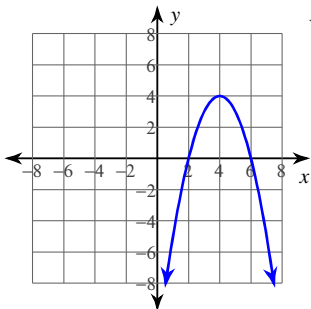
Vertex: $(6, -4)$

6)



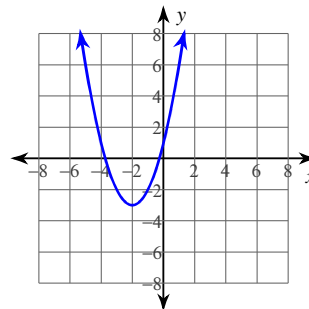
Vertex: $(-3, -3)$

7)



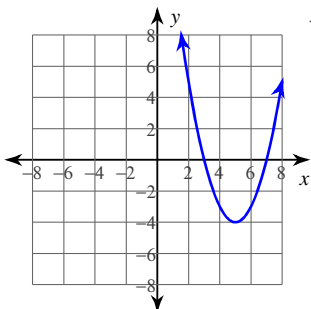
Vertex: $(4, 4)$

8)



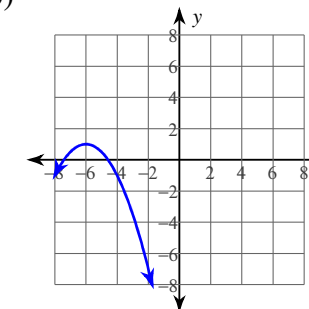
Vertex: $(-2, -3)$

9)



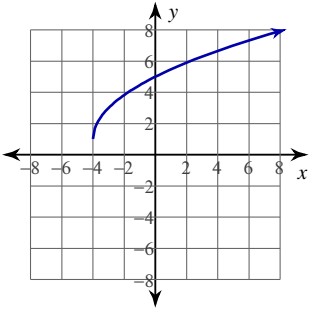
Vertex: $(5, -4)$

10)

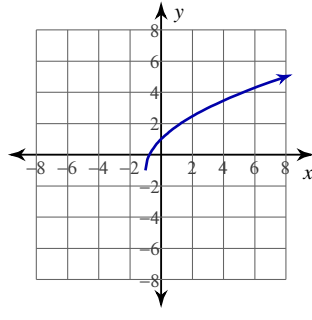


Vertex: $(-6, 1)$

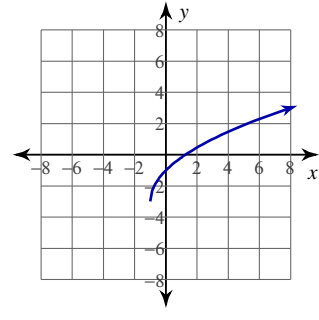
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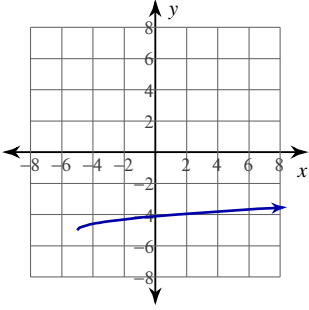
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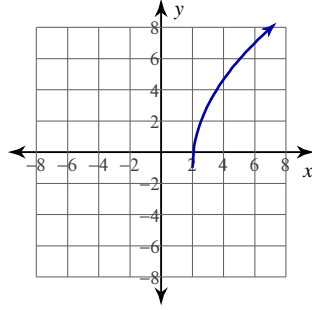
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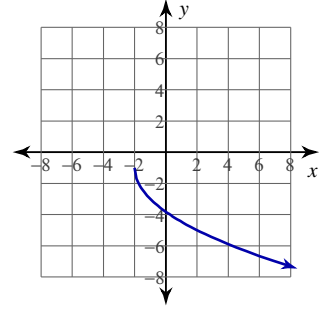
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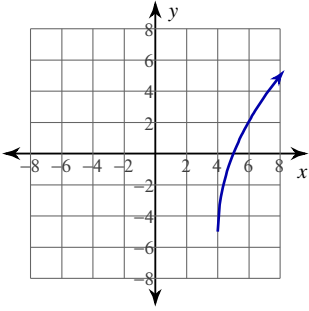
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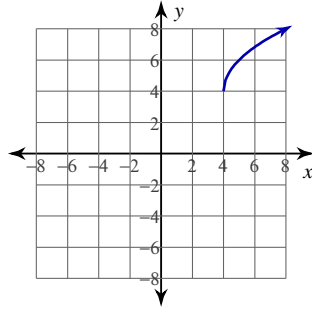
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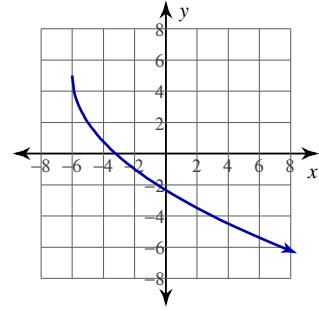
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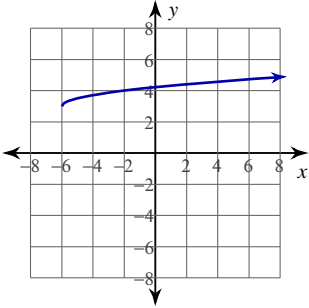
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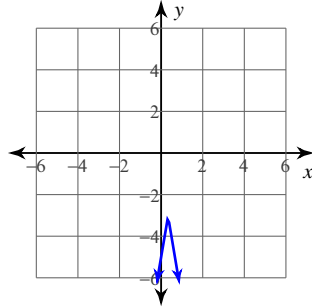
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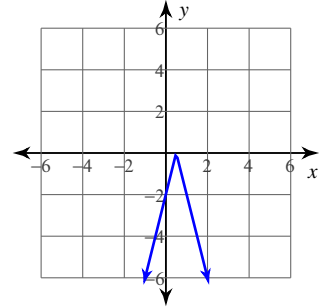
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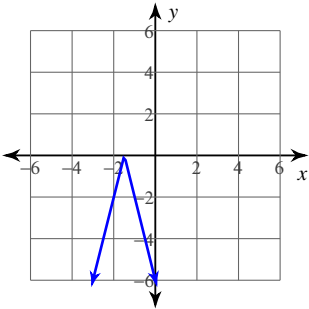
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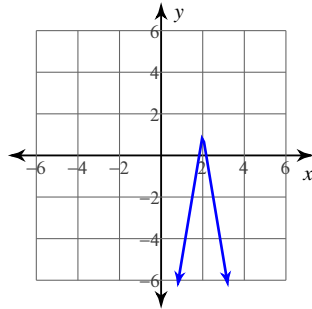
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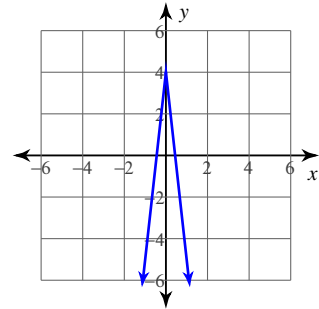
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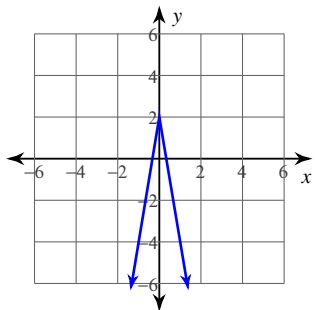
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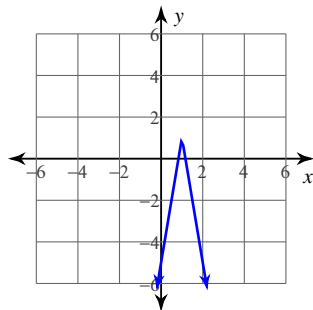
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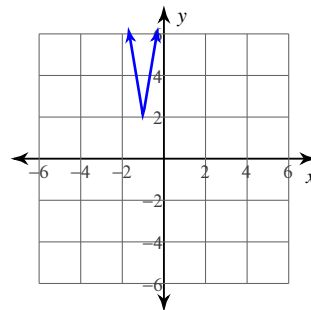
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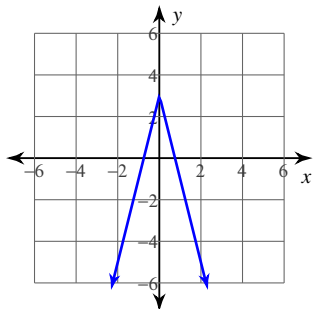
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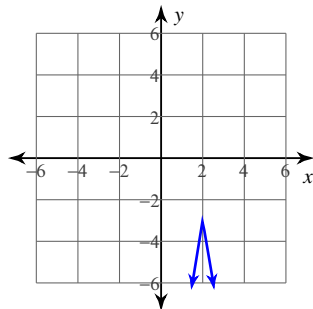
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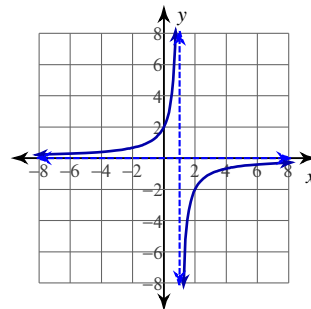
29)



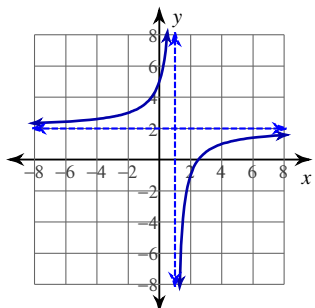
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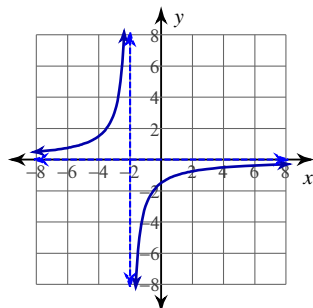
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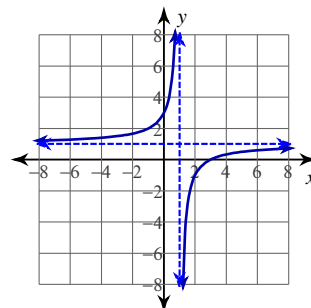
32)



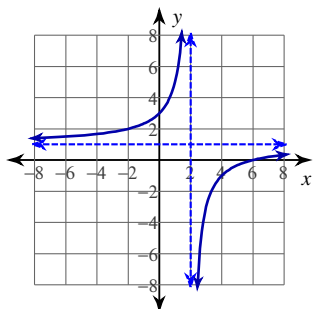
33)



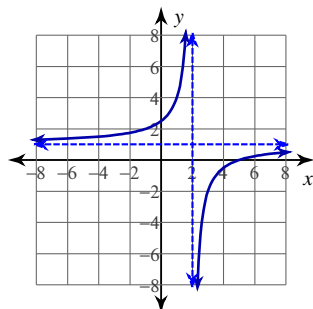
34)



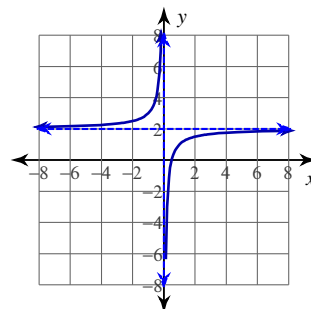
35)



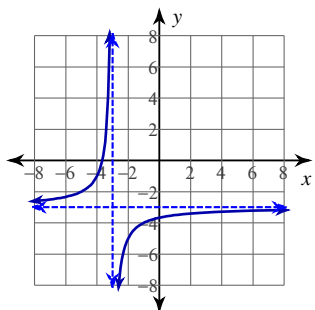
36)



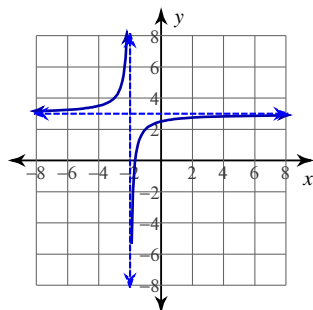
37)



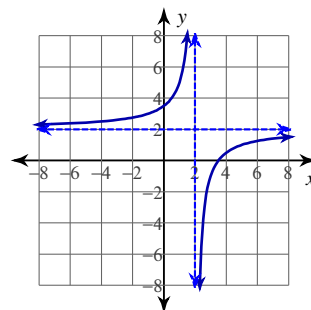
38)



39)



40)



Graphing Functions

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Identify the vertex of each. Then sketch the graph.

1) $f(x) = 2x^2 - 6$

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

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

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

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

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

7) $f(x) = -\frac{1}{3}(x - 3)^2 + 3$

8) $f(x) = \frac{1}{3}(x - 6)^2 - 3$

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

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

Sketch the graph of each function.

11) $y = -2 + \sqrt{\frac{9x + 27}{16}}$

12) $y = 1 - \sqrt{x + 6}$

13) $y = \sqrt{4x + 24} - 5$

14) $y = \sqrt{4x + 16} + 1$

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

16) $y = -\frac{3}{4} \cdot \sqrt{x + 1} + 2$

17) $y = -\frac{2}{3} \cdot \sqrt{x + 1} - 1$

18) $y = -\frac{3}{4} \cdot \sqrt{x + 2} + 1$

19) $y = 2\sqrt{x + 1} - 2$

20) $y = \frac{1}{2} \cdot \sqrt{x - 4} + 1$

Graph each equation.

21) $y = 3|2x - 4| - 4$

22) $y = -2|3x| + 4$

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

24) $y = -2|-2x - 3| - 1$

25) $y = -2|-3x - 2|$

26) $y = 3|2x - 2|$

27) $y = -3|2x| + 1$

28) $y = 3|2x - 2| - 3$

29) $y = -2|2x + 3| - 1$

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

Graph each function.

31) $f(x) = \frac{4}{x + 1} - 1$

32) $f(x) = -\frac{3}{x - 1} - 2$

33) $f(x) = \frac{3}{x - 1} + 1$

34) $f(x) = \frac{3}{x - 2} + 1$

35) $f(x) = -\frac{3}{x + 1} - 2$

36) $f(x) = -\frac{4}{x + 2}$

37) $f(x) = \frac{3}{x - 2}$

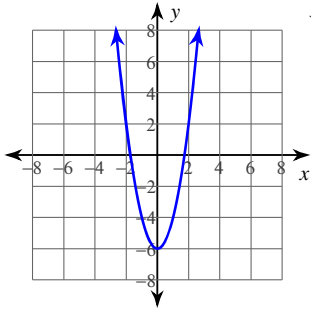
38) $f(x) = -\frac{4}{x + 1} - 1$

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

40) $f(x) = \frac{4}{x + 2} - 2$

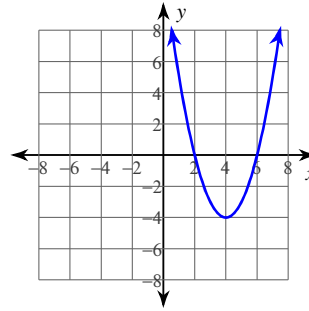
Answers to Graphing Functions (ID: 3)

1)



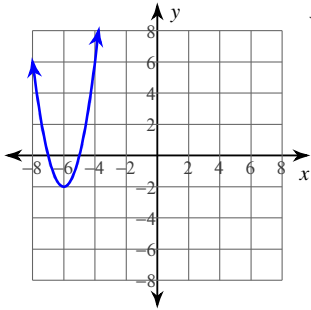
Vertex: $(0, -6)$

2)



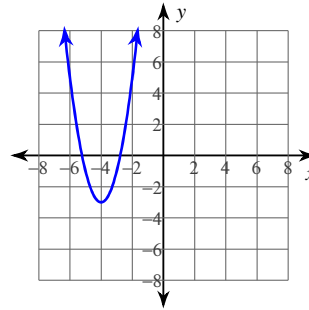
Vertex: $(4, -4)$

3)



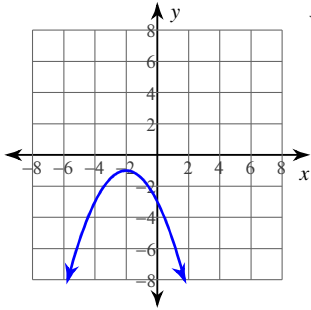
Vertex: $(-6, -2)$

4)



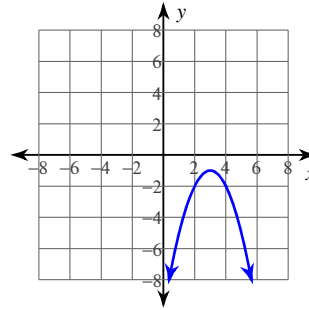
Vertex: $(-4, -3)$

5)



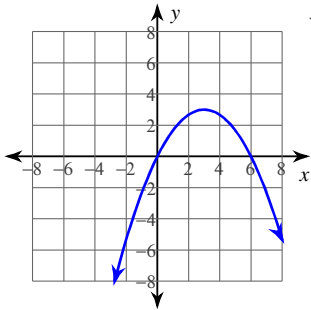
Vertex: $(-2, -1)$

6)



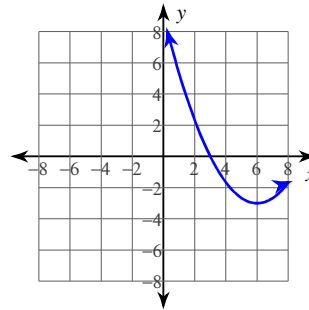
Vertex: $(3, -1)$

7)



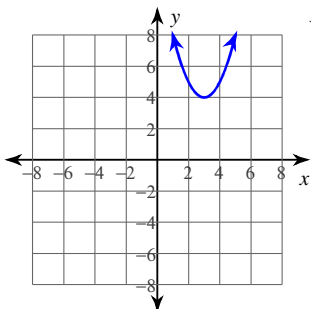
Vertex: $(3, 3)$

8)



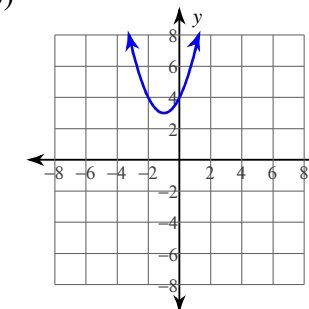
Vertex: $(6, -3)$

9)



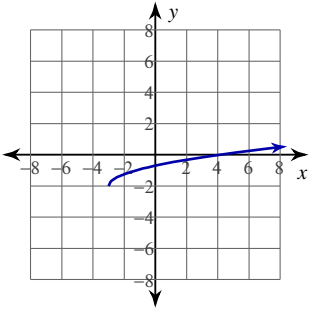
Vertex: $(3, 4)$

10)

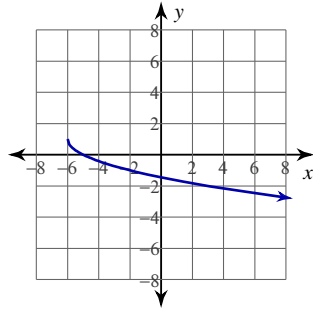


Vertex: $(-1, 3)$

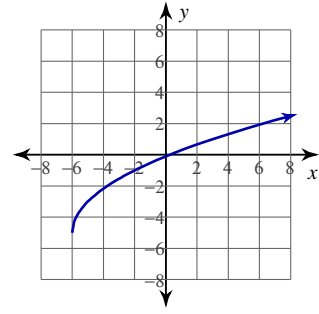
11)



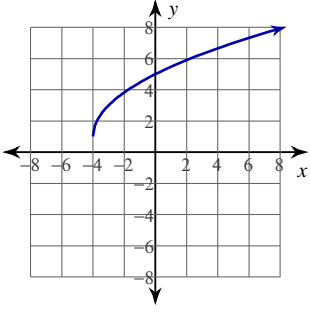
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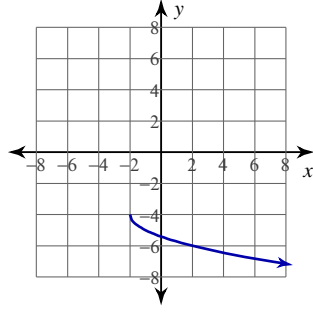
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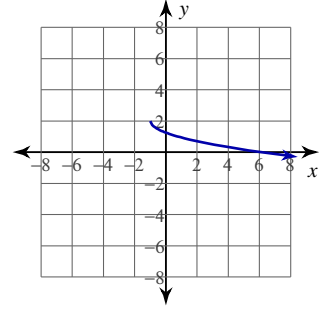
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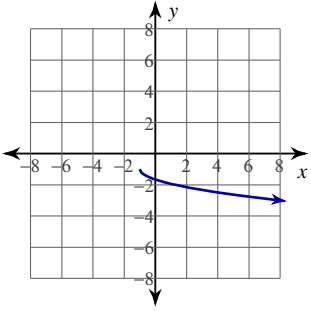
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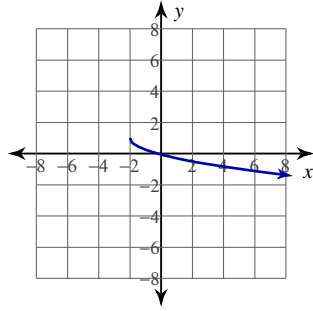
16)



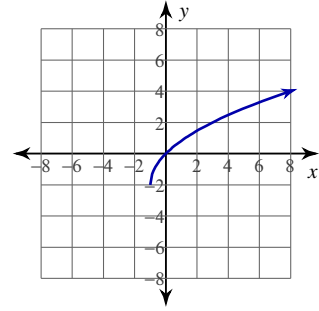
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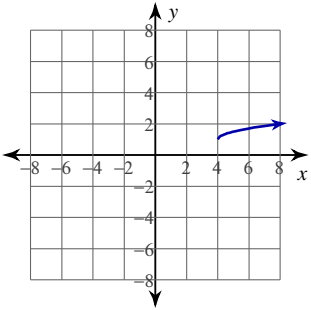
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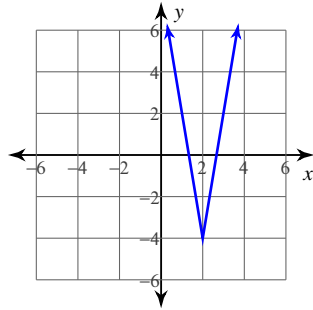
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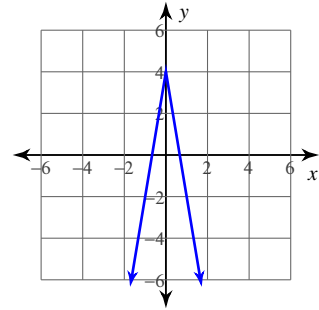
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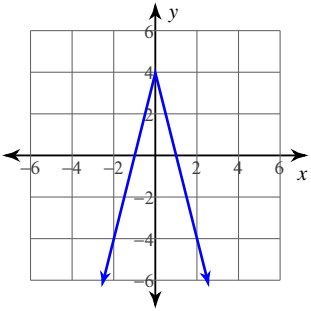
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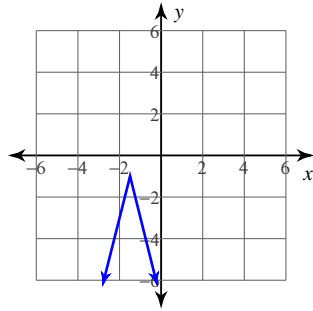
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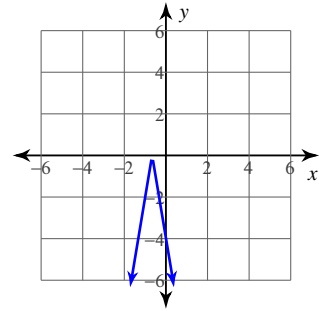
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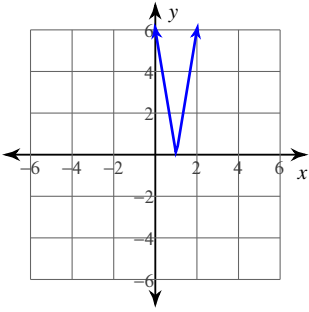
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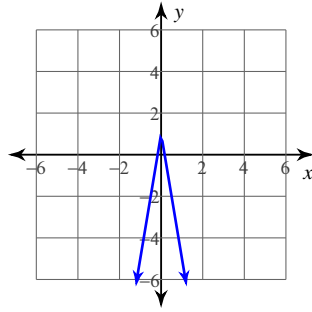
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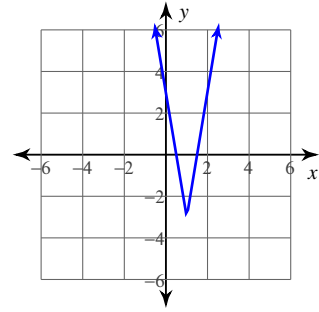
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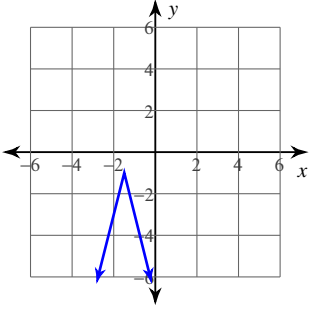
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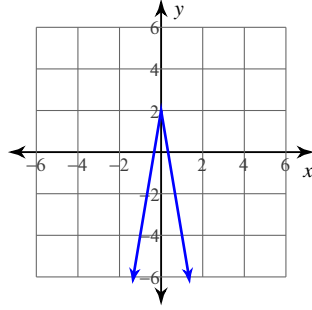
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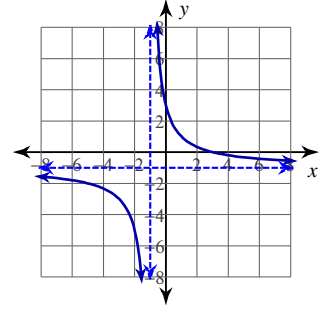
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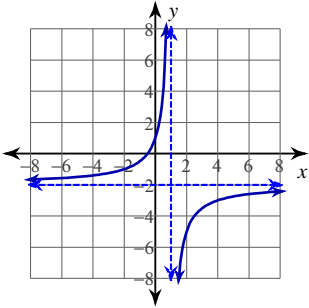
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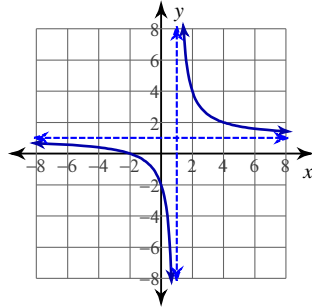
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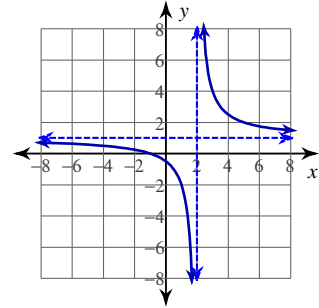
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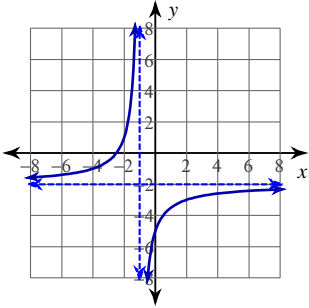
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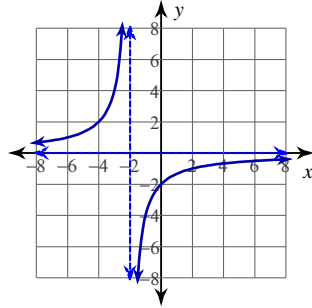
34)



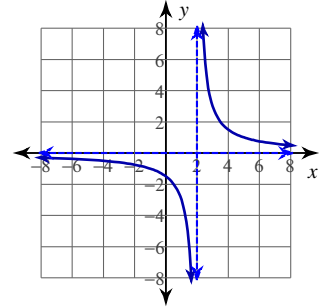
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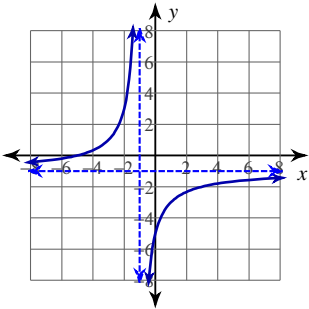
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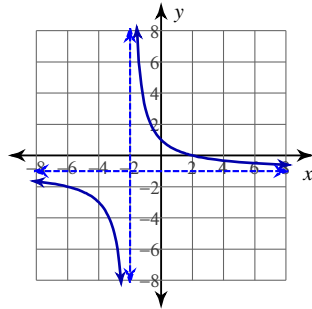
37)



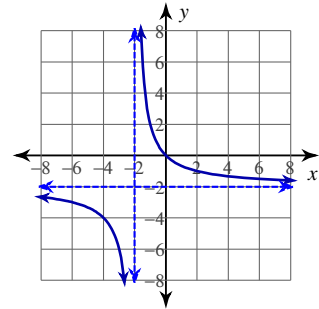
38)



39)



40)



Graphing Functions

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Date _____

Identify the vertex of each. Then sketch the graph.

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

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

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

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

$$5) f(x) = -(x-4)^2 - 4$$

$$6) f(x) = -\frac{1}{3}(x+1)^2 - 5$$

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

$$8) f(x) = -2(x-2)^2 - 5$$

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

$$10) f(x) = (x+6)^2 + 4$$

Sketch the graph of each function.

$$11) y = -\frac{1}{2} \cdot \sqrt{x+2} + 4$$

$$12) y = \frac{1}{2} \cdot \sqrt{x-2} + 2$$

$$13) y = 4\sqrt{x-1} - 2$$

$$14) y = \frac{1}{2} \cdot \sqrt{x+6} - 1$$

$$15) y = \sqrt{4x+20} - 5$$

$$16) y = \sqrt{9x+36} - 3$$

$$17) y = -1 - 2\sqrt{x+5}$$

$$18) y = -3 + \frac{1}{2} \cdot \sqrt{x+6}$$

$$19) y = -\frac{2}{3} \cdot \sqrt{x-4} - 4$$

$$20) y = \frac{1}{2} \cdot \sqrt{x-2} - 1$$

Graph each equation.

$$21) y = 3 \left| 2x+2 \right| - 4$$

$$22) y = 3 \left| 2x-1 \right| + 4$$

$$23) y = 3 \left| 2x+4 \right| + 3$$

$$24) y = -3 \left| -3x+2 \right|$$

$$25) y = 2 \left| 2x-4 \right| - 4$$

$$26) y = 2 \left| 2x \right| - 2$$

$$27) y = 2 \left| 3x \right| - 1$$

$$28) y = 2 \left| 2x-3 \right| + 4$$

$$29) y = 3 \left| 2x+3 \right|$$

$$30) y = 2 \left| 3x \right| - 4$$

Graph each function.

$$31) f(x) = \frac{2}{x} + 1$$

$$32) f(x) = \frac{3}{x+2}$$

$$33) f(x) = \frac{1}{x-2} - 3$$

$$34) f(x) = \frac{4}{x-1} - 1$$

$$35) f(x) = \frac{2}{x+3} - 3$$

$$36) f(x) = \frac{2}{x-3} - 2$$

$$37) f(x) = \frac{4}{x+1} - 2$$

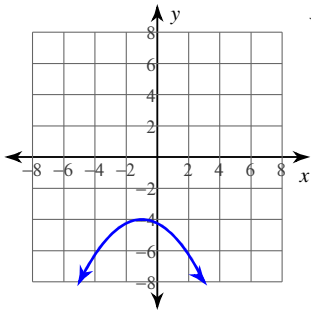
$$38) f(x) = \frac{2}{x} + 2$$

$$39) f(x) = \frac{1}{x} - 1$$

$$40) f(x) = \frac{1}{x+2}$$

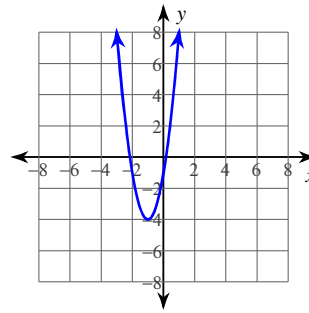
Answers to Graphing Functions (ID: 4)

1)



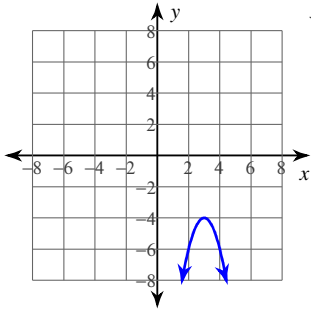
Vertex: $(-1, -4)$

2)



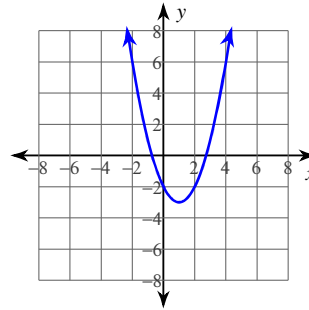
Vertex: $(-1, -4)$

3)



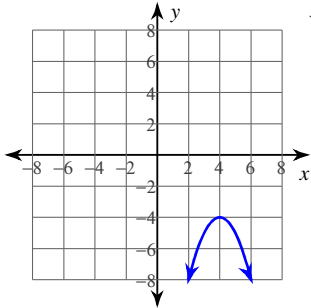
Vertex: $(3, -4)$

4)



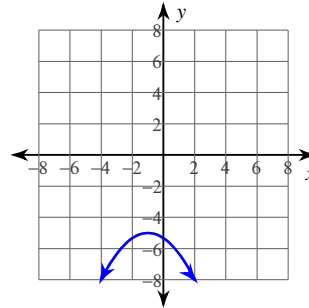
Vertex: $(1, -3)$

5)



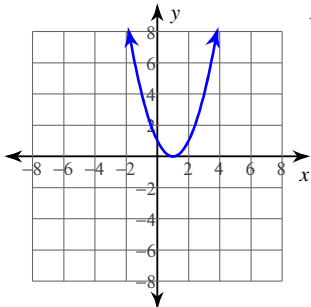
Vertex: $(4, -4)$

6)



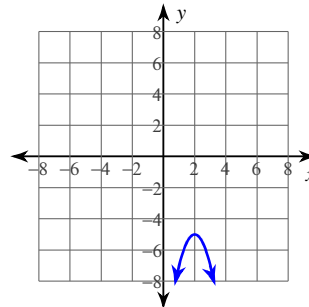
Vertex: $(-1, -5)$

7)



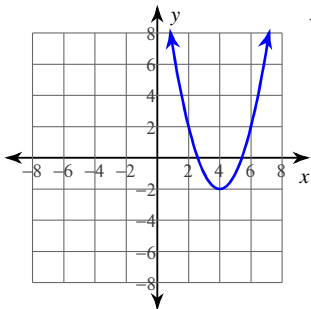
Vertex: $(1, 0)$

8)



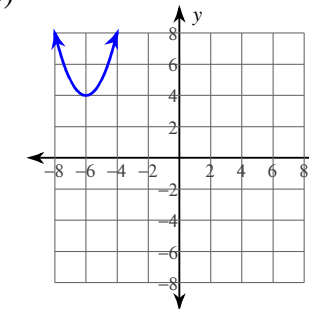
Vertex: $(2, -5)$

9)



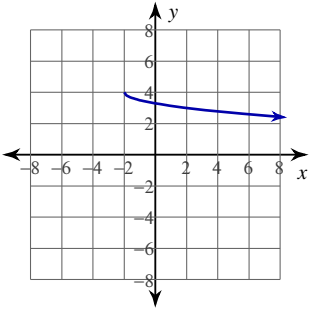
Vertex: $(4, -2)$

10)

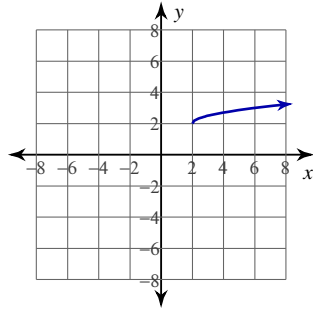


Vertex: $(-6, 4)$

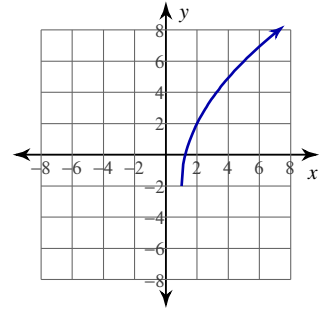
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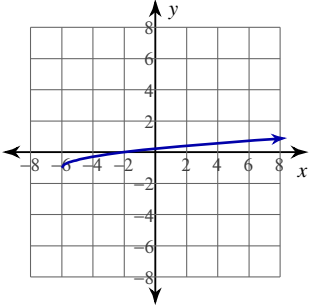
12)



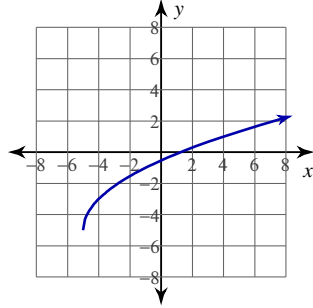
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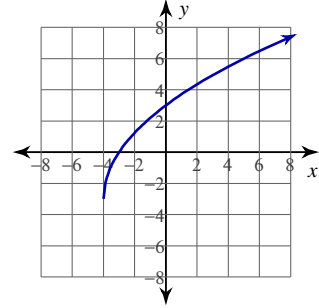
14)



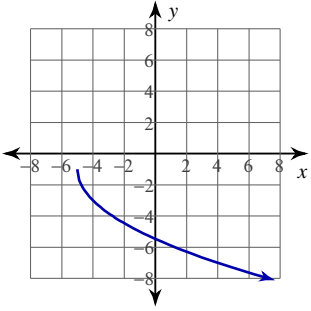
15)



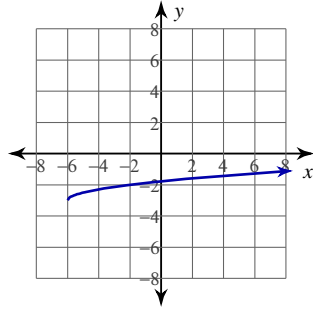
16)



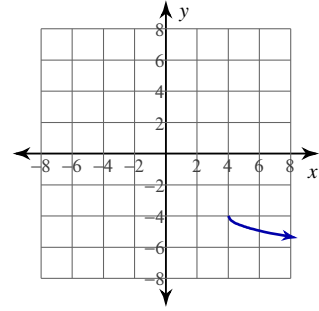
17)



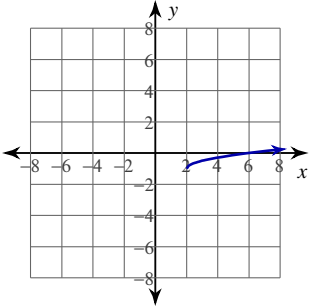
18)



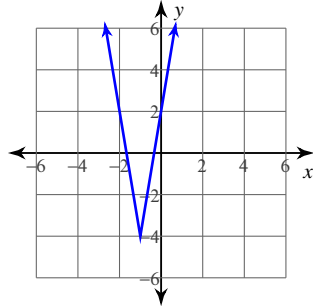
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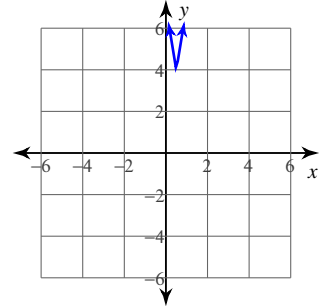
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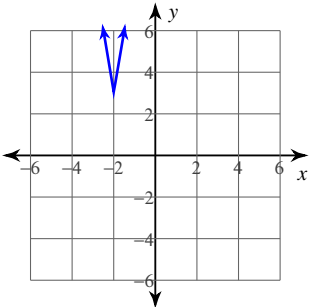
21)



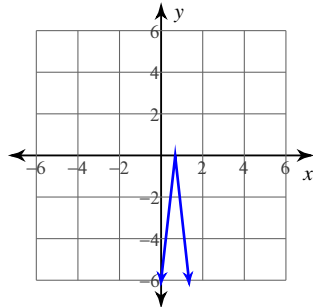
22)



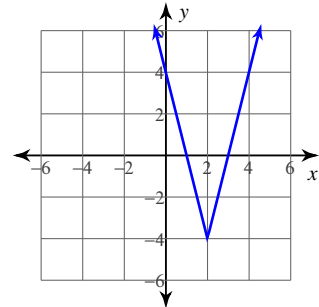
23)



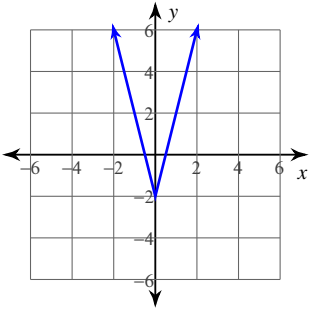
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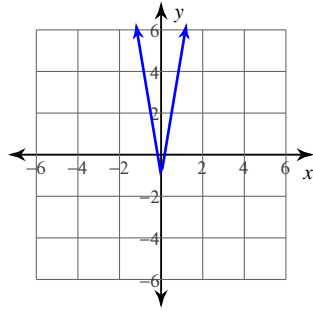
25)



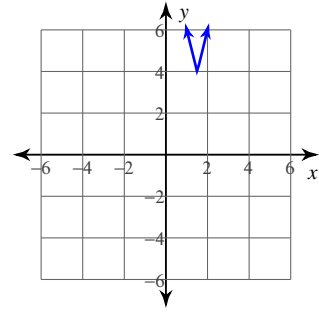
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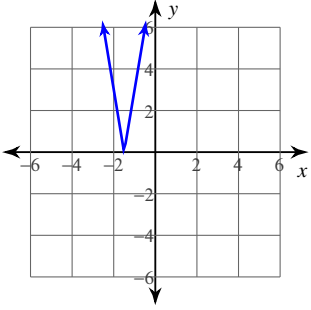
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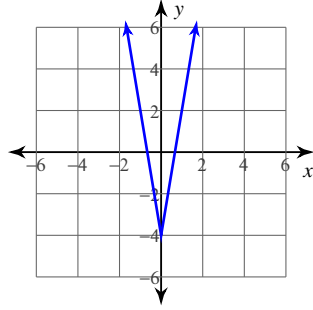
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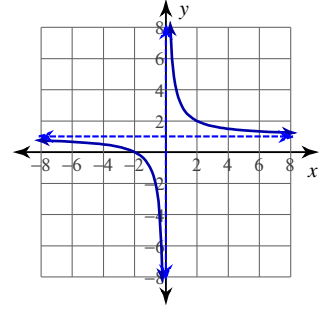
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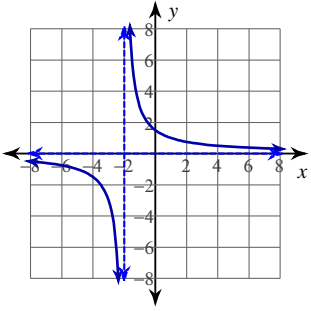
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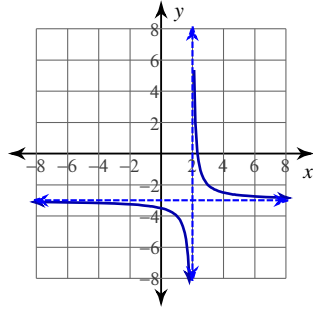
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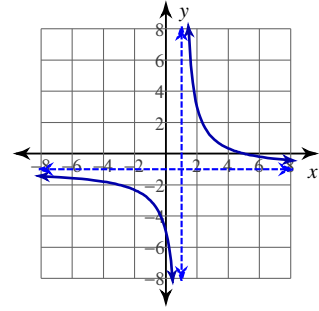
32)



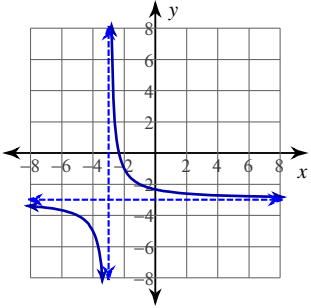
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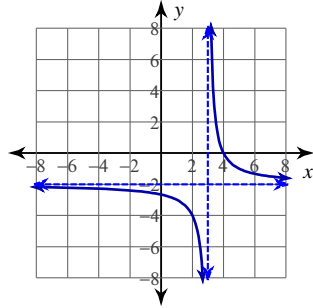
34)



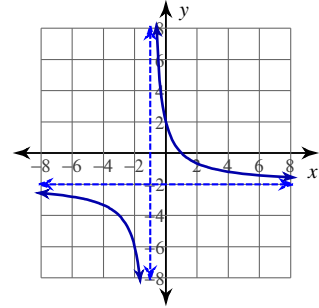
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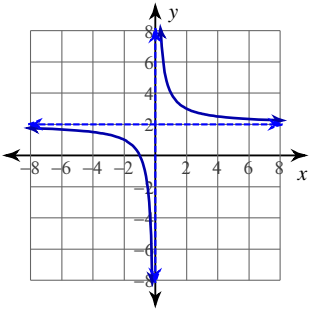
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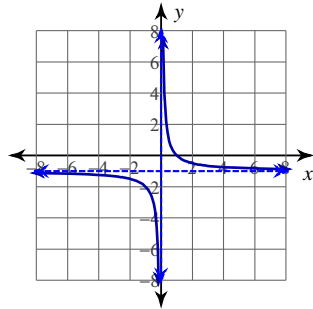
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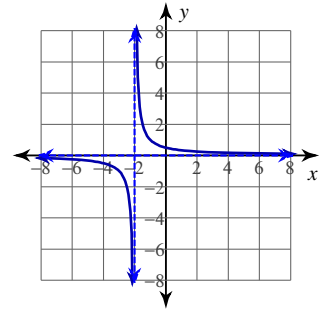
38)



39)



40)



Graphing Functions

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Date _____

Identify the vertex of each. Then sketch the graph.

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

2) $f(x) = -\frac{1}{2}(x+4)^2 - 5$

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

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

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

6) $f(x) = -\frac{1}{3}(x+4)^2 - 5$

7) $f(x) = -(x+4)^2 - 1$

8) $f(x) = \frac{1}{3}(x+6)^2 - 1$

9) $f(x) = -\frac{1}{2}(x+5)^2 - 5$

10) $f(x) = -\frac{1}{3}(x+4)^2 - 2$

Sketch the graph of each function.

11) $y = \frac{3}{4} \cdot \sqrt{x-2} + 1$

12) $y = \frac{2}{3} \cdot \sqrt{x-3} + 5$

13) $y = 2\sqrt{x+4} - 3$

14) $y = 1 + 3\sqrt{x-4}$

15) $y = -\frac{2}{5} \cdot \sqrt{x+4} - 5$

16) $y = 2\sqrt{x-3} + 4$

17) $y = -2\sqrt{x-2} + 1$

18) $y = \sqrt{9x+18} - 4$

19) $y = \frac{1}{2} \cdot \sqrt{x+2} + 4$

20) $y = 1 - \frac{1}{2} \cdot \sqrt{x-1}$

Graph each equation.

21) $y = -3|3x| - 2$

22) $y = -2|-3x+4|$

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

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

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

26) $y = -3|2x-4| + 1$

27) $y = -2|-2x+2| + 1$

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

29) $y = -3|-3x-2|$

30) $y = -2|2x-4|$

Graph each function.

31) $f(x) = -\frac{1}{x-4} - 3$

32) $f(x) = -\frac{3}{x} - 2$

33) $f(x) = -\frac{2}{x+3} - 3$

34) $f(x) = \frac{1}{x-4} - 1$

35) $f(x) = -\frac{3}{x+2} - 2$

36) $f(x) = -\frac{2}{x-3} - 2$

37) $f(x) = -\frac{3}{x+1} + 2$

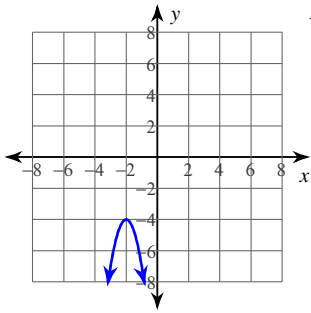
38) $f(x) = -\frac{2}{x} + 2$

39) $f(x) = \frac{4}{x} + 2$

40) $f(x) = \frac{3}{x} - 2$

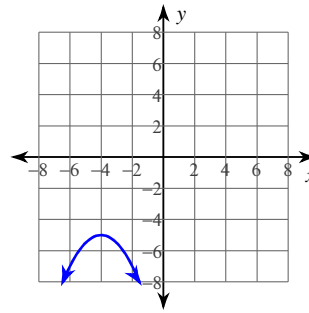
Answers to Graphing Functions (ID: 5)

1)



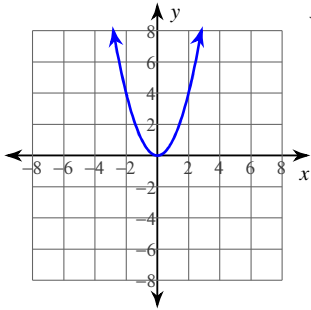
Vertex: $(-2, -4)$

2)



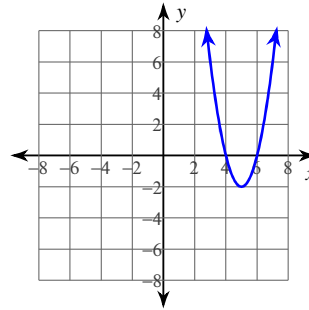
Vertex: $(-4, -5)$

3)



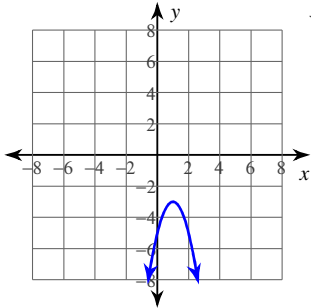
Vertex: $(0, 0)$

4)



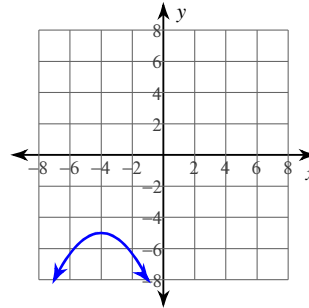
Vertex: $(5, -2)$

5)



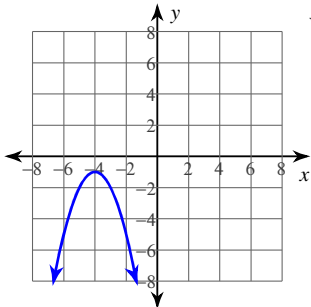
Vertex: $(1, -3)$

6)



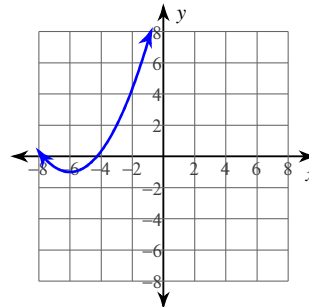
Vertex: $(-4, -5)$

7)



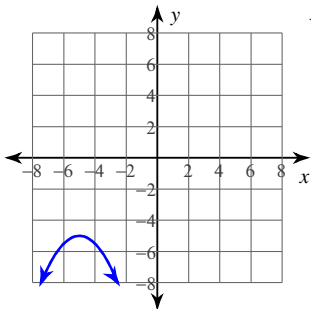
Vertex: $(-4, -1)$

8)



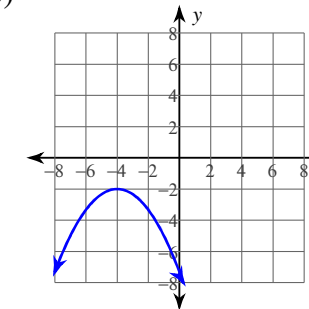
Vertex: $(-6, -1)$

9)



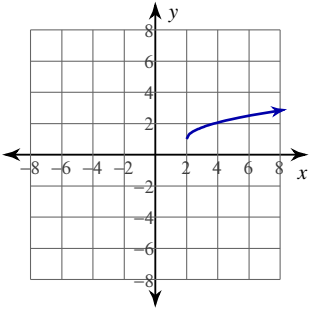
Vertex: $(-5, -5)$

10)

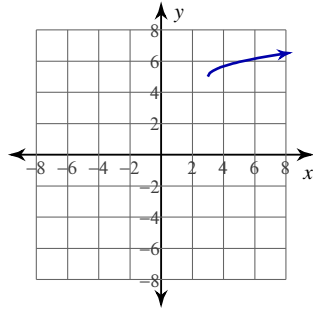


Vertex: $(-4, -2)$

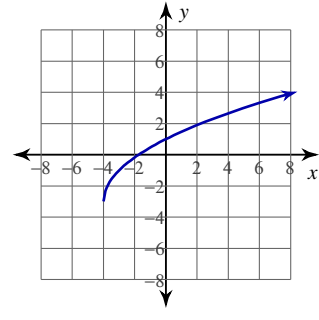
11)



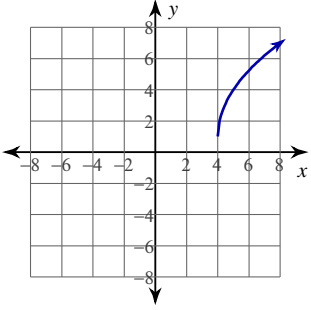
12)



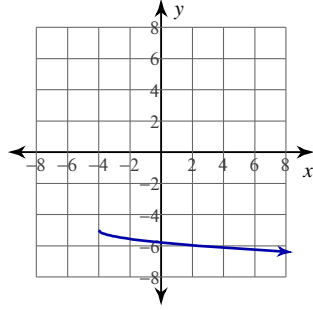
13)



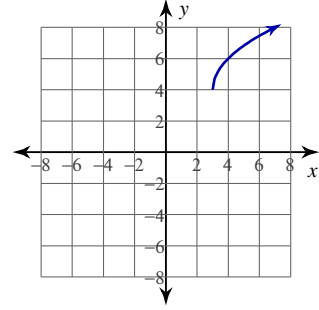
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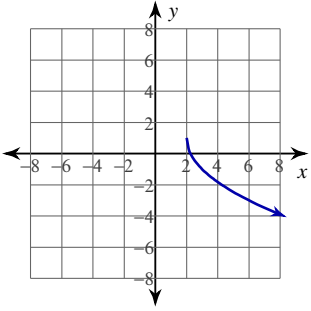
15)



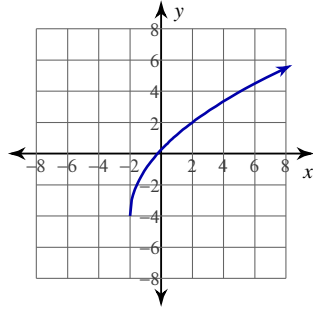
16)



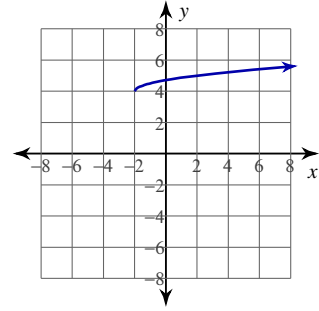
17)



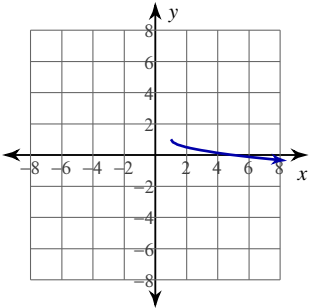
18)



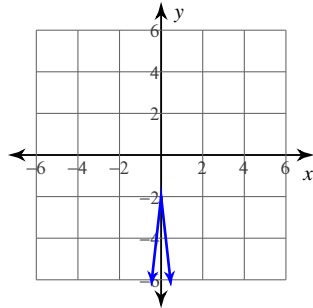
19)



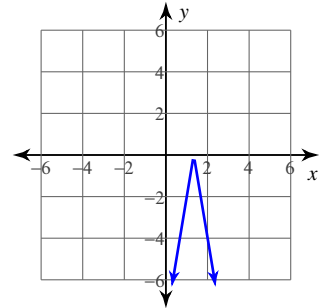
20)



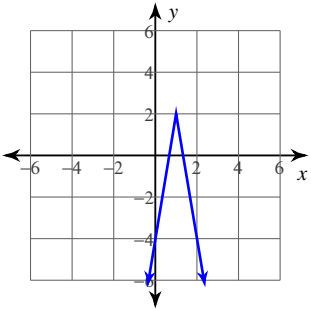
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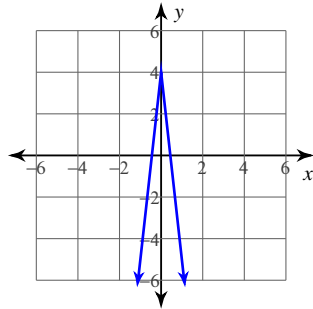
22)



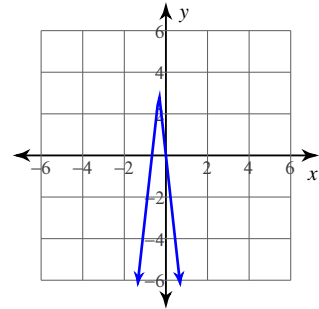
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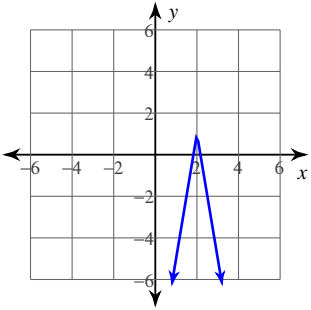
24)



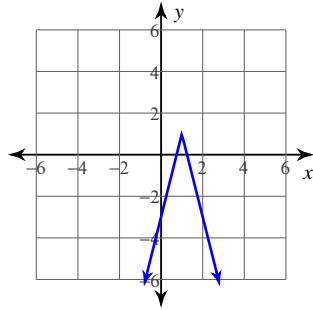
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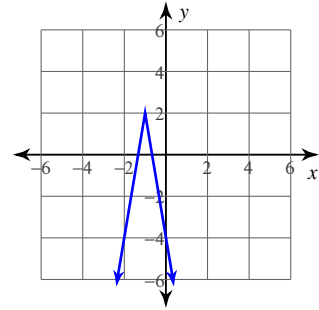
26)



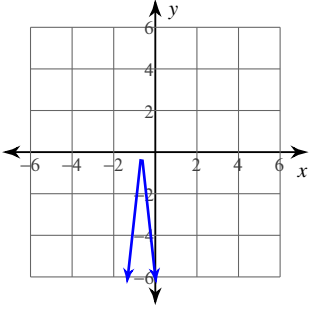
27)



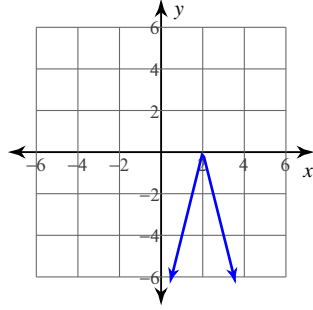
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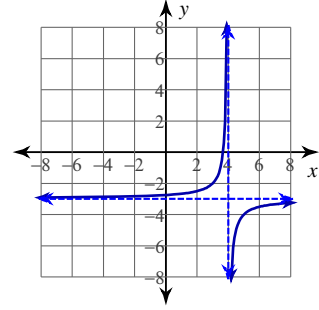
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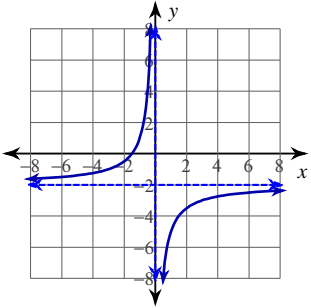
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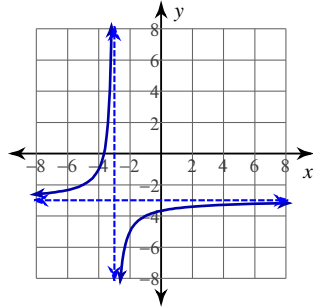
31)



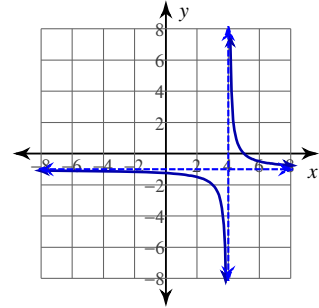
32)



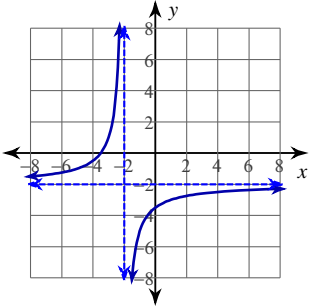
33)



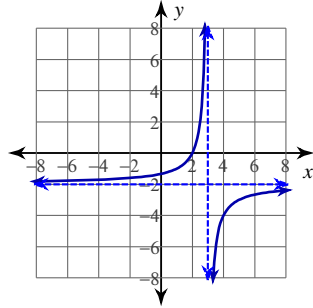
34)



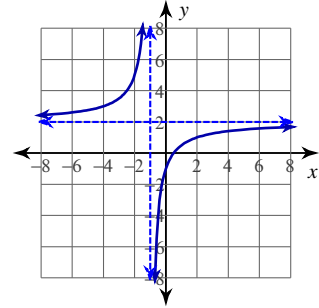
35)



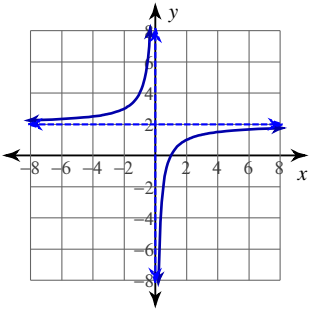
36)



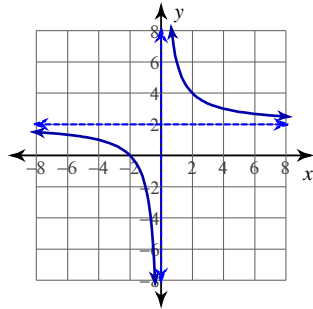
37)



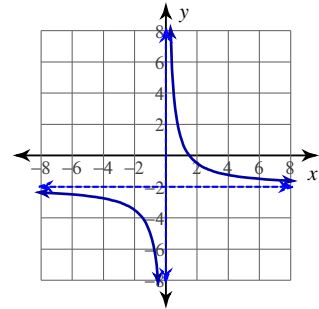
38)



39)



40)



Graphing Functions

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Date _____

Identify the vertex of each. Then sketch the graph.

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

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

5) $f(x) = (x + 1)^2 - 6$

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

9) $f(x) = \frac{1}{2}(x + 5)^2 - 1$

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

4) $f(x) = -\frac{1}{2}(x - 5)^2 - 5$

6) $f(x) = -\frac{2}{7}(x - 3)^2 - 1$

8) $f(x) = (x + 4)^2 - 1$

10) $f(x) = -\frac{3}{4}(x - 2)^2 - 6$

Sketch the graph of each function.

11) $y = 2 - \frac{1}{2} \cdot \sqrt{x - 1}$

13) $y = 3 + \sqrt{\frac{16x + 16}{25}}$

15) $y = \sqrt{16x + 48} - 5$

17) $y = \frac{2}{3} \cdot \sqrt{x - 2} + 2$

19) $y = 2 - \frac{1}{2} \cdot \sqrt{x + 6}$

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

14) $y = \frac{3}{5} \cdot \sqrt{x + 3} + 1$

16) $y = 2 + \sqrt{\frac{4x - 4}{9}}$

18) $y = -\frac{1}{2} \cdot \sqrt{x - 4} + 2$

20) $y = -2\sqrt{x + 3} + 2$

Graph each equation.

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

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

25) $y = -3|-3x - 2| - 1$

27) $y = 2|-2x + 1| - 2$

29) $y = -2|-2x| - 1$

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

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

26) $y = 2|-2x - 3| - 2$

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

30) $y = 2|-3x - 1|$

Graph each function.

31) $f(x) = -\frac{4}{x - 2} - 1$

33) $f(x) = -\frac{3}{x + 2} - 1$

35) $f(x) = \frac{3}{x}$

37) $f(x) = \frac{4}{x} + 1$

39) $f(x) = \frac{4}{x - 2} - 1$

32) $f(x) = \frac{3}{x + 1} + 1$

34) $f(x) = -\frac{4}{x - 1}$

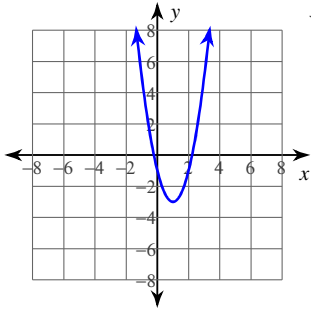
36) $f(x) = \frac{4}{x - 1} + 2$

38) $f(x) = -\frac{3}{x - 2} - 1$

40) $f(x) = \frac{4}{x - 1}$

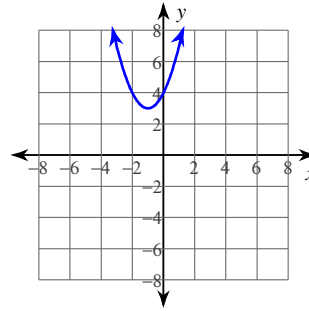
Answers to Graphing Functions (ID: 6)

1)



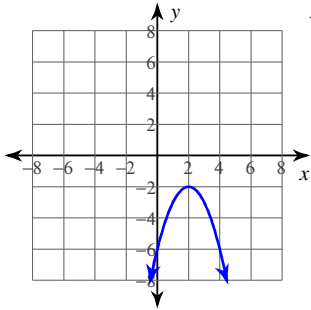
Vertex: (1, -3)

2)



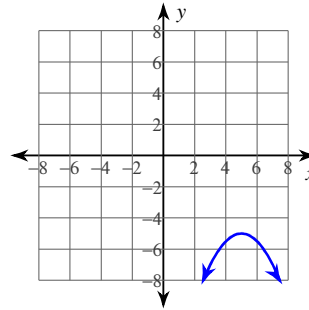
Vertex: (-1, 3)

3)



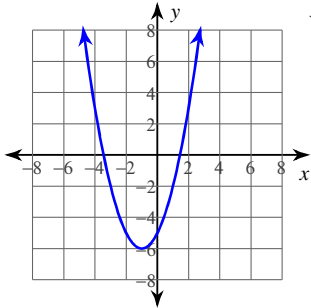
Vertex: (2, -2)

4)



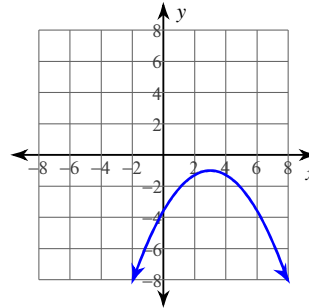
Vertex: (5, -5)

5)



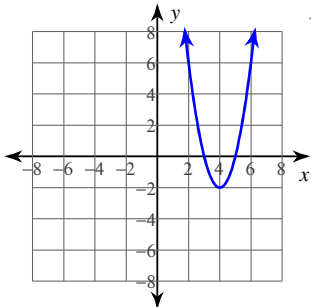
Vertex: (-1, -6)

6)



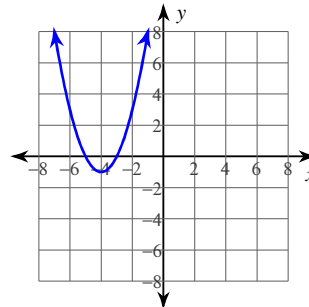
Vertex: (3, -1)

7)



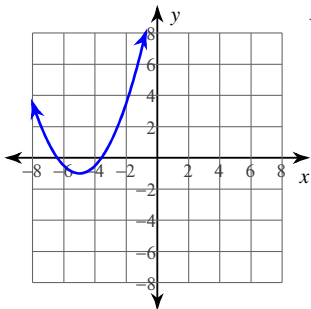
Vertex: (4, -2)

8)



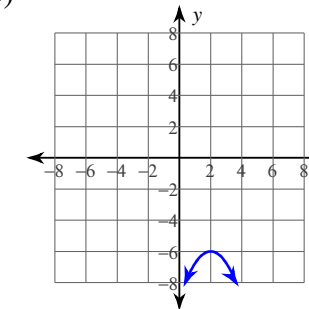
Vertex: (-4, -1)

9)



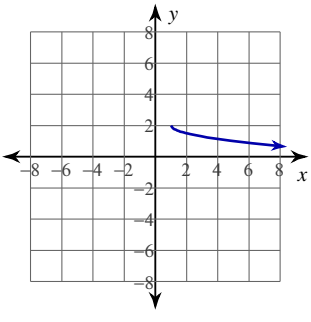
Vertex: (-5, -1)

10)

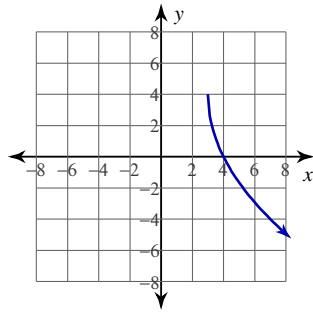


Vertex: (2, -6)

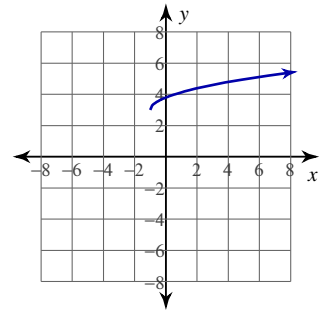
11)



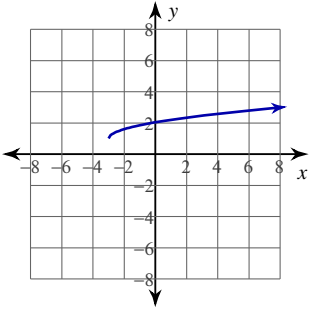
12)



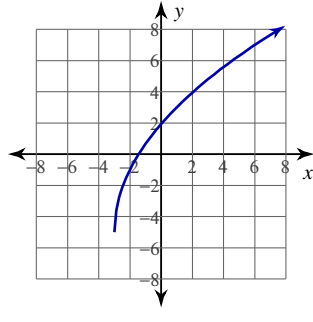
13)



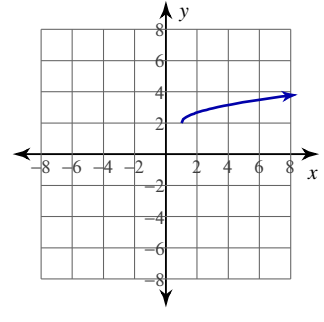
14)



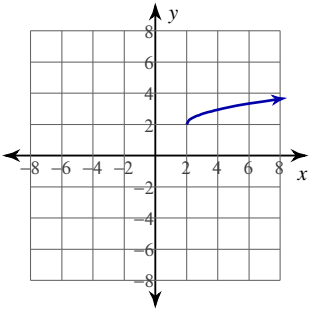
15)



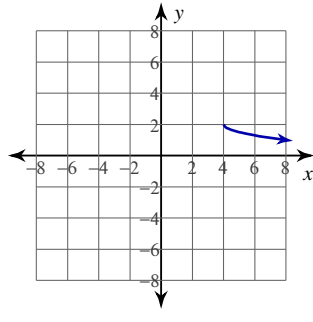
16)



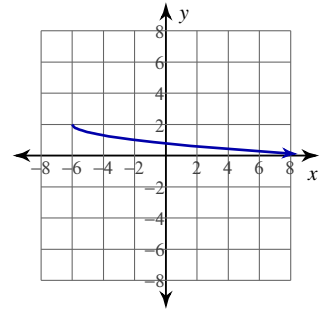
17)



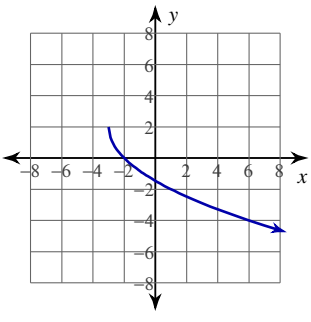
18)



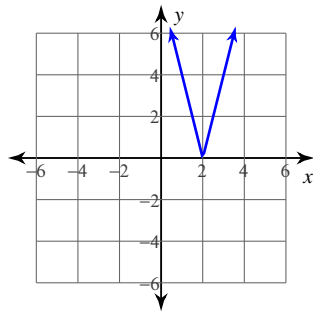
19)



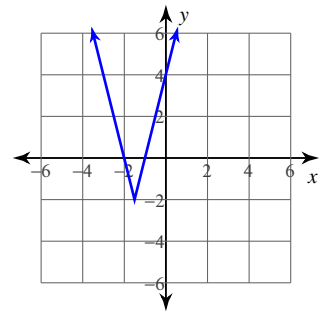
20)



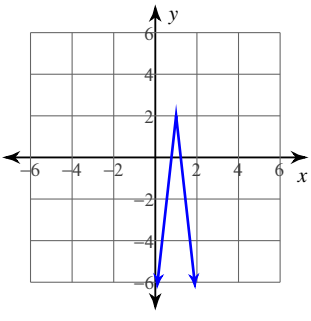
21)



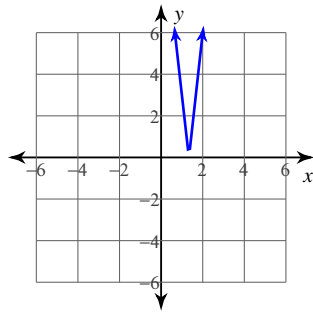
22)



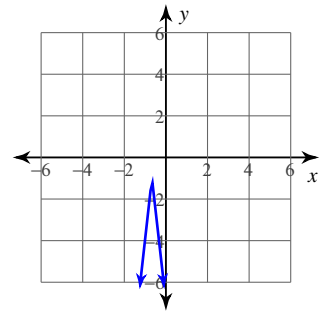
23)



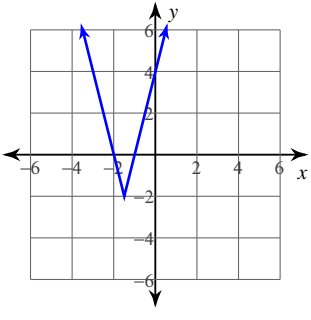
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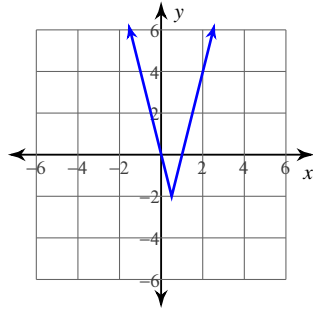
25)



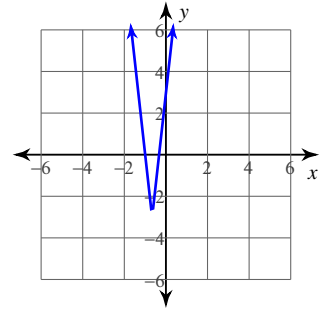
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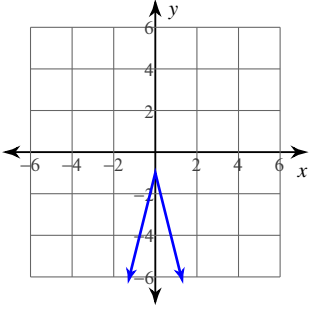
27)



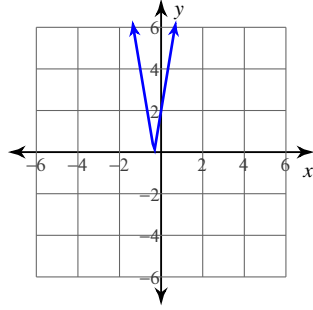
28)



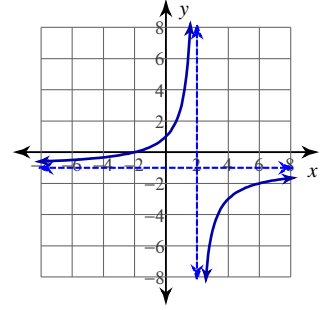
29)



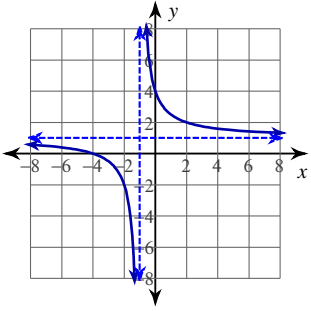
30)



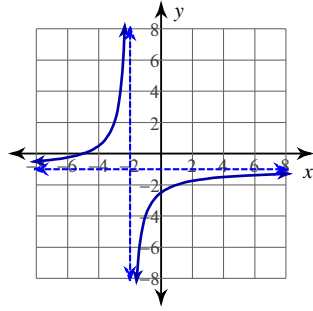
31)



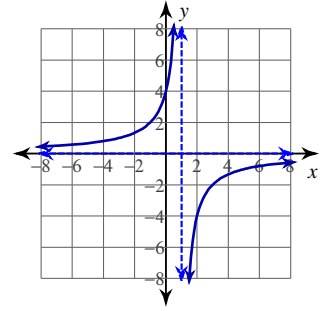
32)



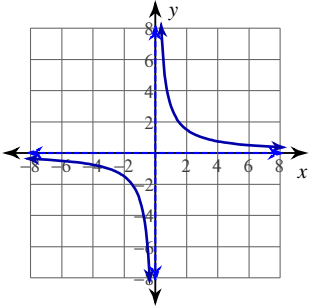
33)



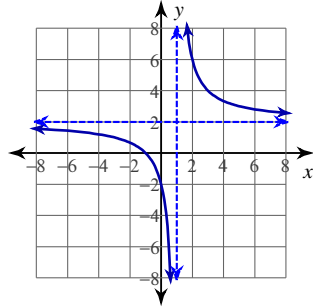
34)



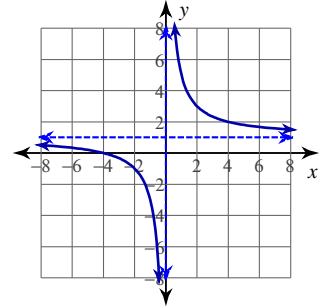
35)



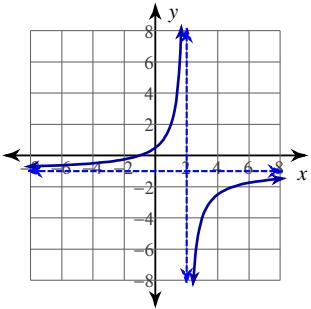
36)



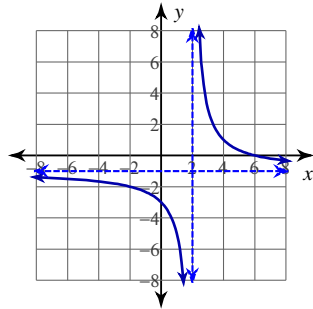
37)



38)



39)



40)

