

**Group #1: Sketch the graph of each function.**

1)  $y = 2x^2$

2)  $y = -x^2$

3)  $y = x^2$

4)  $y = -2x^2$

**Group #2: Sketch the graph of each function.**

5)  $y = -x^2 + 6x - 8$

6)  $y = -2x^2 - 16x - 33$

7)  $y = -x^2 + 4x - 6$

8)  $y = x^2 - 6x + 12$

$$9) y = x^2 + 4x + 6$$

$$10) y = -x^2 - 4x - 7$$

$$11) y = x^2 + 4x + 2$$

$$12) y = -2x^2 - 12x - 14$$

$$13) y = x^2 - 6x + 13$$

$$14) y = -2x^2 + 16x - 36$$

$$15) y = x^2 + 2x$$

$$16) y = 3x^2 + 12x + 9$$

**Group #3: Sketch the graph of each function. Vertex IS NOT a lattice point.**

$$17) y = x^2 + 7x + 15$$

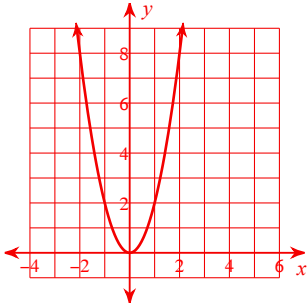
$$18) y = 2x^2 + 6x + 2$$

$$19) y = x^2 + 3x + 4$$

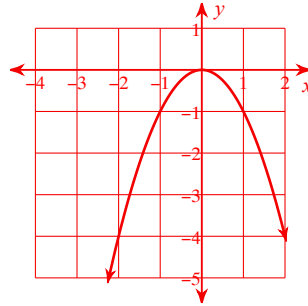
$$20) y = -2x^2 + 10x - 9$$

**Group #1: Sketch the graph of each function.**

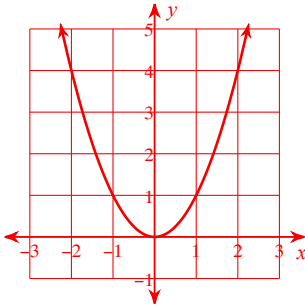
1)  $y = 2x^2$



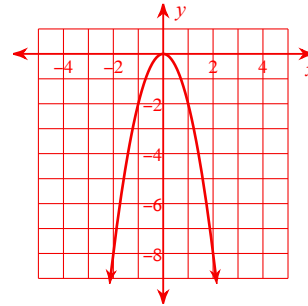
2)  $y = -x^2$



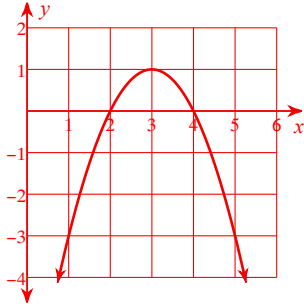
3)  $y = x^2$



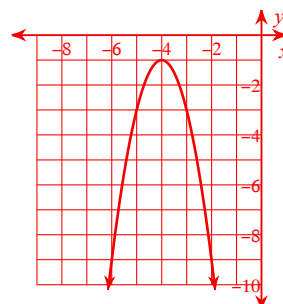
4)  $y = -2x^2$

**Group #2: Sketch the graph of each function.**

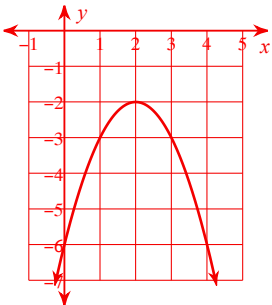
5)  $y = -x^2 + 6x - 8$



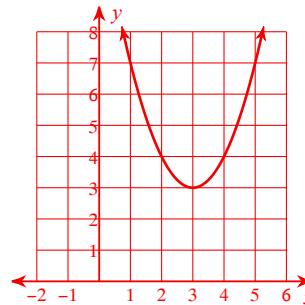
6)  $y = -2x^2 - 16x - 33$



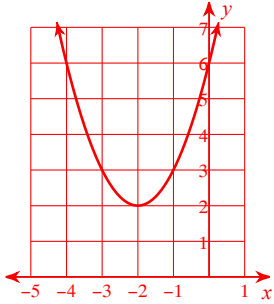
7)  $y = -x^2 + 4x - 6$



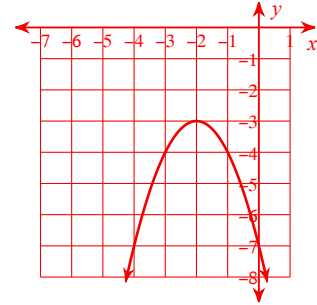
8)  $y = x^2 - 6x + 12$



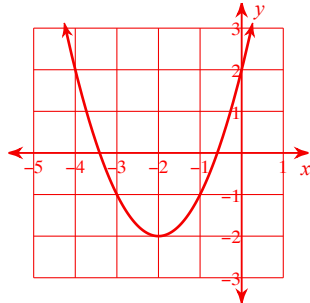
9)  $y = x^2 + 4x + 6$



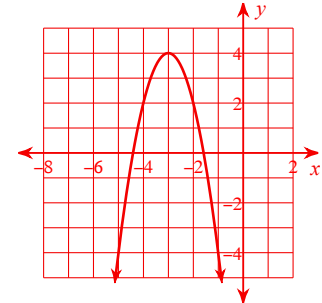
10)  $y = -x^2 - 4x - 7$



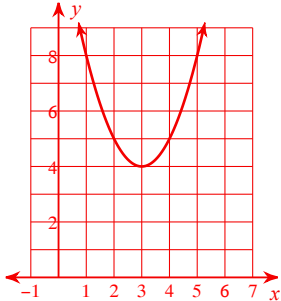
11)  $y = x^2 + 4x + 2$



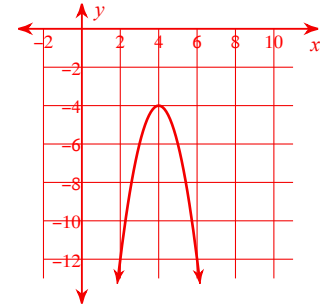
12)  $y = -2x^2 - 12x - 14$



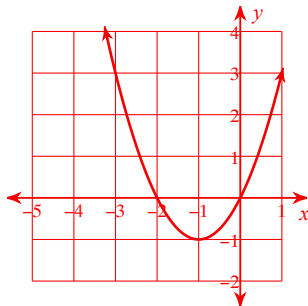
13)  $y = x^2 - 6x + 13$



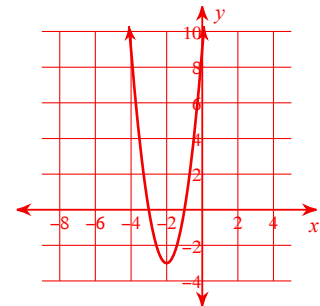
14)  $y = -2x^2 + 16x - 36$



15)  $y = x^2 + 2x$

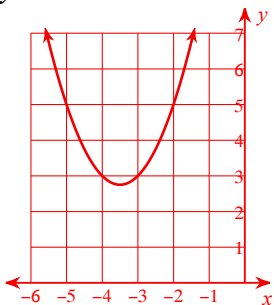


16)  $y = 3x^2 + 12x + 9$

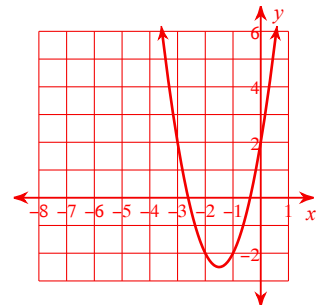


**Group #3: Sketch the graph of each function. Vertex IS NOT a lattice point.**

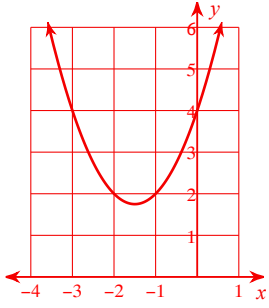
17)  $y = x^2 + 7x + 15$



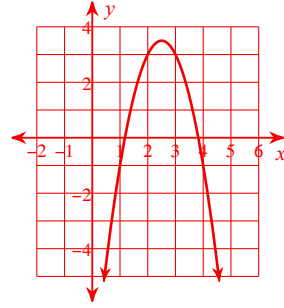
18)  $y = 2x^2 + 6x + 2$



19)  $y = x^2 + 3x + 4$



20)  $y = -2x^2 + 10x - 9$



**Group #1: Sketch the graph of each function.**

1)  $y = 4x^2$

2)  $y = -2x^2$

3)  $y = -x^2$

4)  $y = x^2$

**Group #2: Sketch the graph of each function.**

5)  $y = -2x^2 - 12x - 17$

6)  $y = 2x^2 - 16x + 31$

7)  $y = 2x^2 + 4x + 5$

8)  $y = 2x^2 - 4x + 1$

$$9) y = 2x^2 + 8x + 5$$

$$10) y = -2x^2 + 8x - 5$$

$$11) y = -x^2 + 2x$$

$$12) y = -2x^2 - 8x - 9$$

$$13) y = 2x^2 + 16x + 35$$

$$14) y = 2x^2 - 12x + 21$$

$$15) y = 2x^2 - 4x - 1$$

$$16) y = 2x^2 + 8x + 6$$

**Group #3: Sketch the graph of each function. Vertex IS NOT a lattice point.**

$$17) y = x^2 - 7x + 14$$

$$18) y = -x^2 - 5x - 7$$

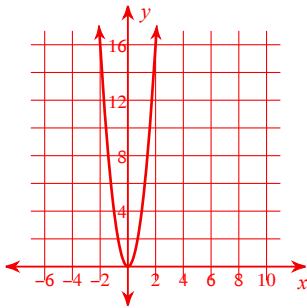


$$19) y = x^2 - 7x + 10$$

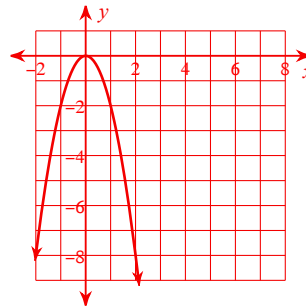
$$20) y = -x^2 - 9x - 18$$

**Group #1: Sketch the graph of each function.**

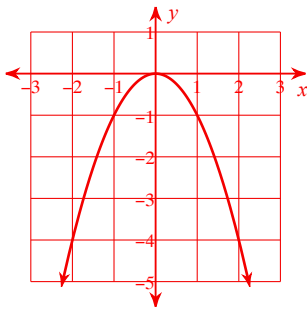
1)  $y = 4x^2$



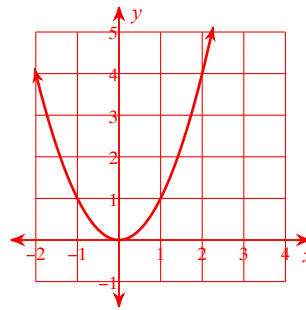
2)  $y = -2x^2$



3)  $y = -x^2$

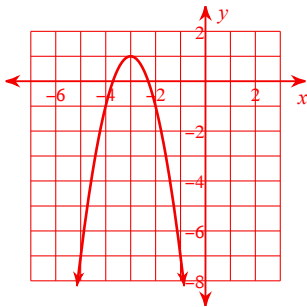


4)  $y = x^2$

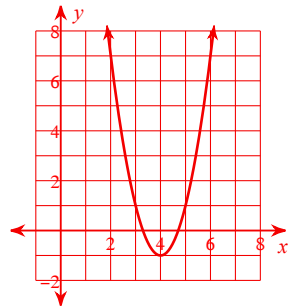


**Group #2: Sketch the graph of each function.**

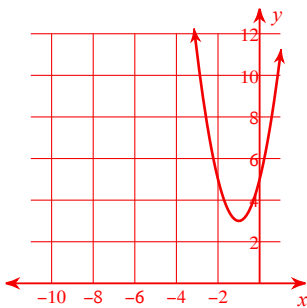
5)  $y = -2x^2 - 12x - 17$



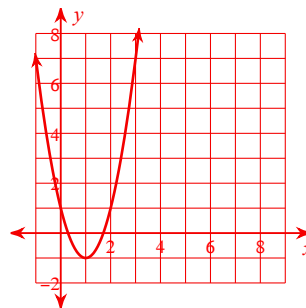
6)  $y = 2x^2 - 16x + 31$



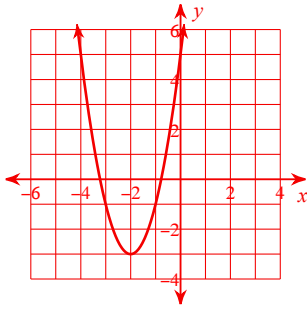
7)  $y = 2x^2 + 4x + 5$



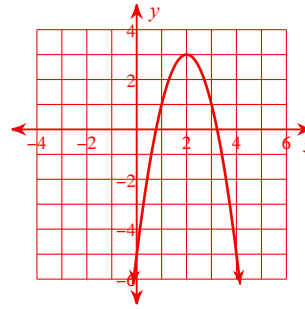
8)  $y = 2x^2 - 4x + 1$



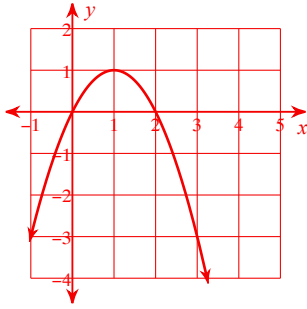
9)  $y = 2x^2 + 8x + 5$



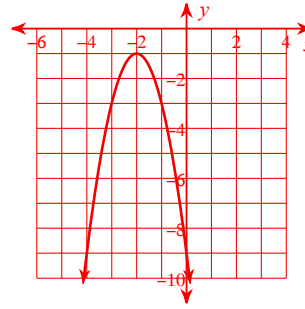
10)  $y = -2x^2 + 8x - 5$



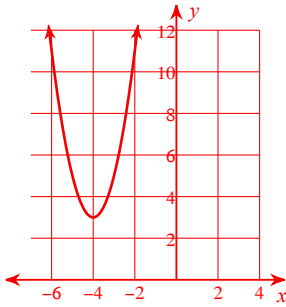
11)  $y = -x^2 + 2x$



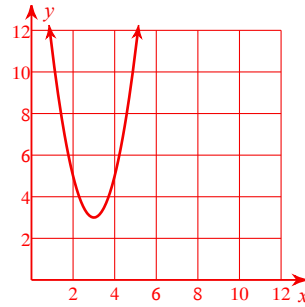
12)  $y = -2x^2 - 8x - 9$



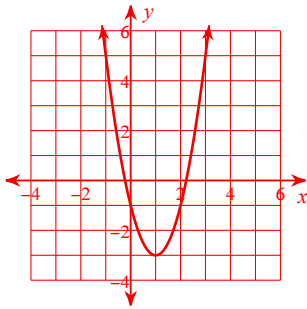
13)  $y = 2x^2 + 16x + 35$



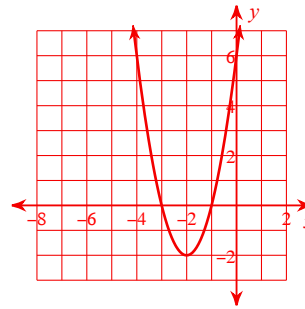
14)  $y = 2x^2 - 12x + 21$



15)  $y = 2x^2 - 4x - 1$

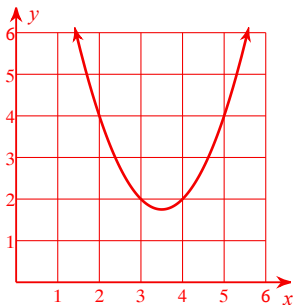


16)  $y = 2x^2 + 8x + 6$

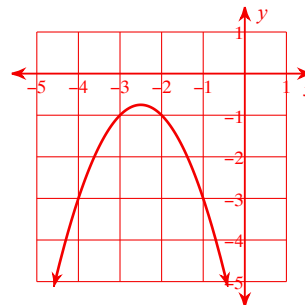


**Group #3: Sketch the graph of each function. Vertex IS NOT a lattice point.**

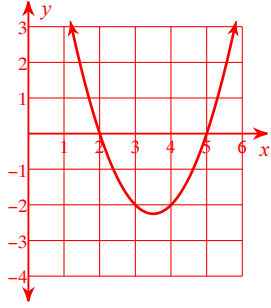
17)  $y = x^2 - 7x + 14$



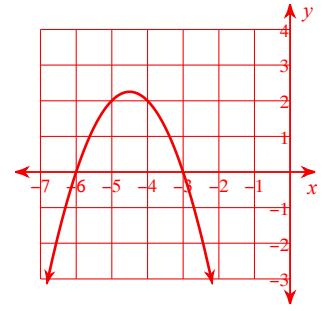
18)  $y = -x^2 - 5x - 7$



19)  $y = x^2 - 7x + 10$



20)  $y = -x^2 - 9x - 18$



**Group #1: Sketch the graph of each function.**

1)  $y = -x^2$

2)  $y = -2x^2$

3)  $y = x^2$

4)  $y = 2x^2$

**Group #2: Sketch the graph of each function.**

5)  $y = x^2 + 8x + 13$

6)  $y = -2x^2 - 16x - 36$

7)  $y = x^2 + 2x - 1$

8)  $y = -2x^2 + 12x - 14$

$$9) y = 2x^2 - 16x + 36$$

$$10) y = x^2 - 6x + 5$$

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$$14) y = 2x^2 + 12x + 15$$

$$15) y = -2x^2 - 8x - 10$$

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**Group #3: Sketch the graph of each function. Vertex IS NOT a lattice point.**

$$17) y = -3x^2 - 21x - 37$$

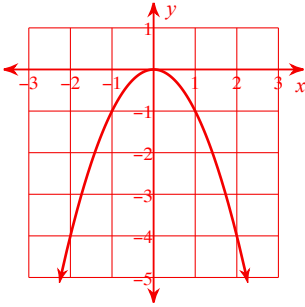
$$18) y = 2x^2 - 10x + 10$$

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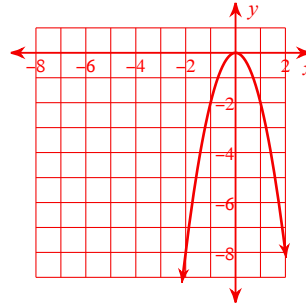
$$20) y = -3x^2 + 3x - 1$$

**Group #1: Sketch the graph of each function.**

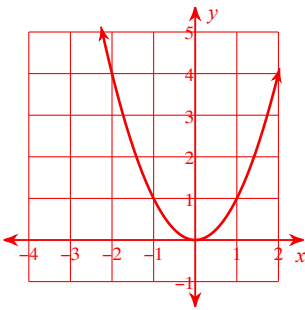
1)  $y = -x^2$



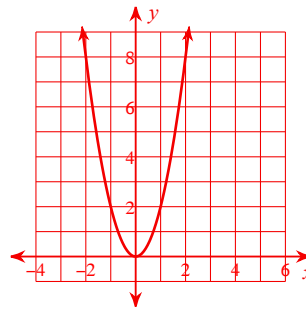
2)  $y = -2x^2$



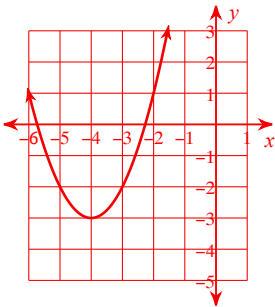
3)  $y = x^2$



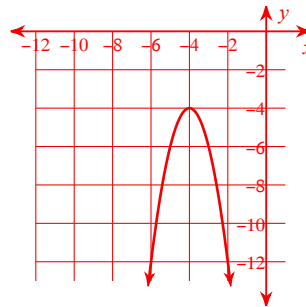
4)  $y = 2x^2$

**Group #2: Sketch the graph of each function.**

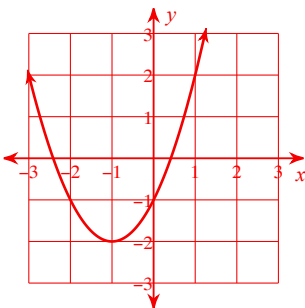
5)  $y = x^2 + 8x + 13$



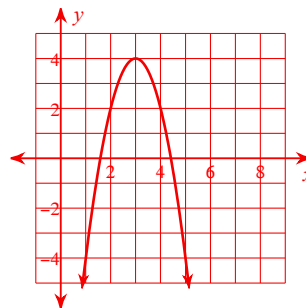
6)  $y = -2x^2 - 16x - 36$



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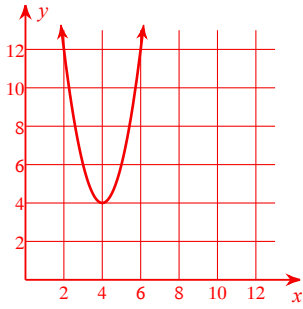


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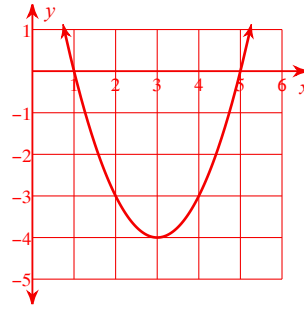




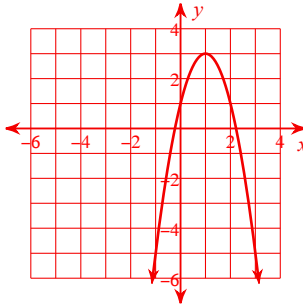
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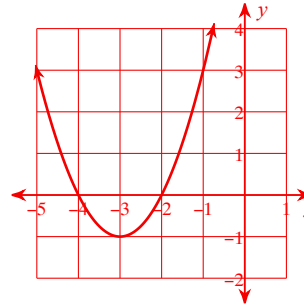
10)  $y = x^2 - 6x + 5$



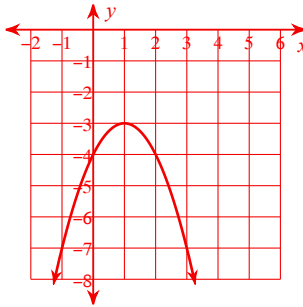
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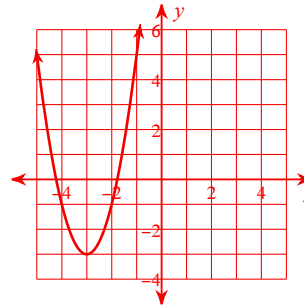
12)  $y = x^2 + 6x + 8$



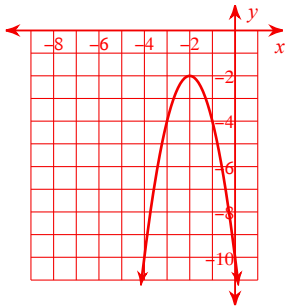
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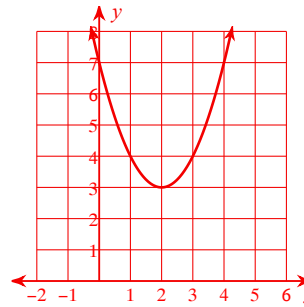
14)  $y = 2x^2 + 12x + 15$



15)  $y = -2x^2 - 8x - 10$

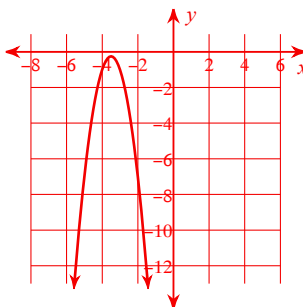


16)  $y = x^2 - 4x + 7$

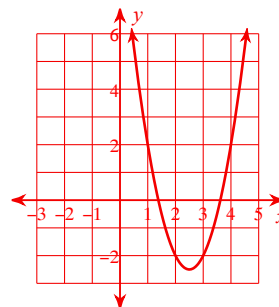


**Group #3: Sketch the graph of each function. Vertex IS NOT a lattice point.**

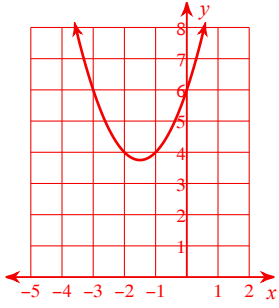
17)  $y = -3x^2 - 21x - 37$



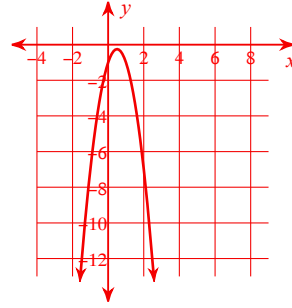
18)  $y = 2x^2 - 10x + 10$



19)  $y = x^2 + 3x + 6$



20)  $y = -3x^2 + 3x - 1$



**Group #1: Sketch the graph of each function.**

1)  $y = -2x^2$

2)  $y = 3x^2$

3)  $y = 2x^2$

4)  $y = x^2$

**Group #2: Sketch the graph of each function.**

5)  $y = -2x^2 - 8x - 9$

6)  $y = -x^2 - 8x - 18$

7)  $y = -x^2 + 4x - 5$

8)  $y = x^2 - 6x + 12$

$$9) y = -x^2 - 8x - 12$$

$$10) y = 2x^2 - 16x + 36$$

$$11) y = -2x^2 + 16x - 36$$

$$12) y = 2x^2 - 4x - 1$$

$$13) y = 2x^2 + 4x - 1$$

$$14) y = -2x^2 - 8x - 10$$

$$15) y = 3x^2 + 18x + 29$$

$$16) y = -x^2 + 4x$$

**Group #3: Sketch the graph of each function. Vertex IS NOT a lattice point.**

$$17) y = x^2 - 5x + 4$$

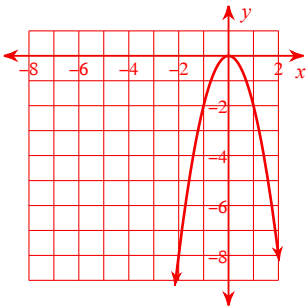
$$18) y = x^2 - 5x + 10$$

$$19) y = x^2 + 7x + 14$$

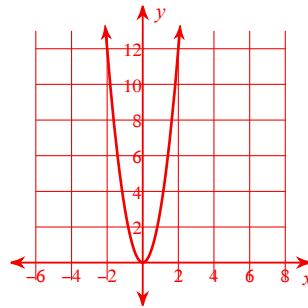
$$20) y = 3x^2 - 9x + 7$$

**Group #1: Sketch the graph of each function.**

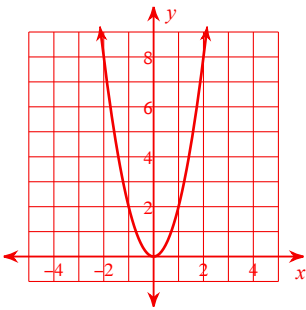
1)  $y = -2x^2$



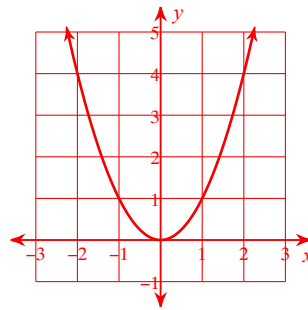
2)  $y = 3x^2$



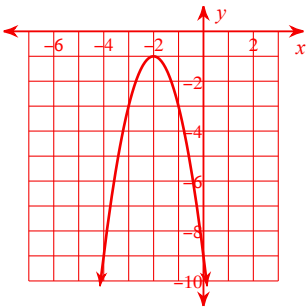
3)  $y = 2x^2$



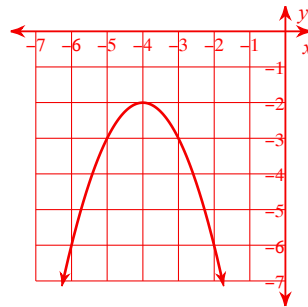
4)  $y = x^2$

**Group #2: Sketch the graph of each function.**

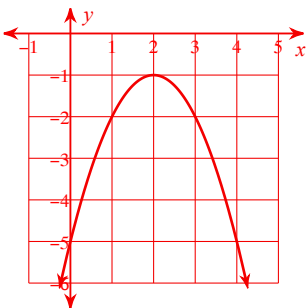
5)  $y = -2x^2 - 8x - 9$



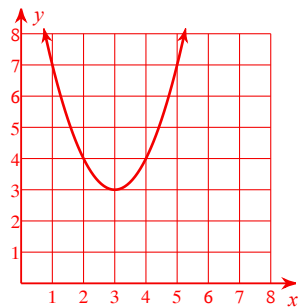
6)  $y = -x^2 - 8x - 18$



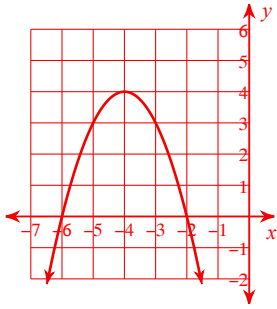
7)  $y = -x^2 + 4x - 5$



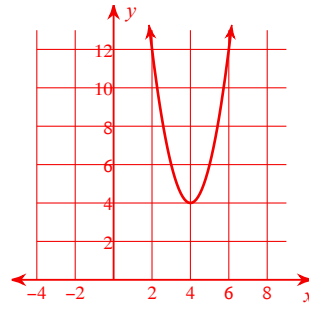
8)  $y = x^2 - 6x + 12$



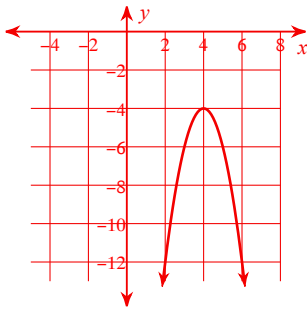
9)  $y = -x^2 - 8x - 12$



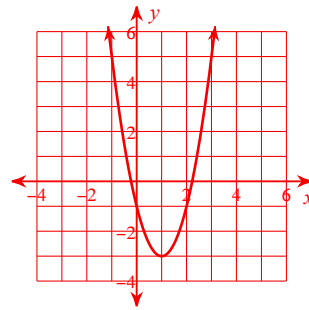
10)  $y = 2x^2 - 16x + 36$



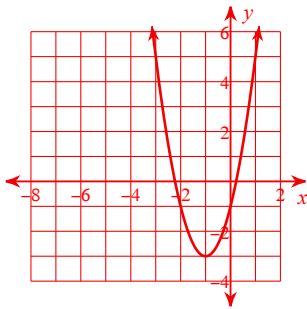
11)  $y = -2x^2 + 16x - 36$



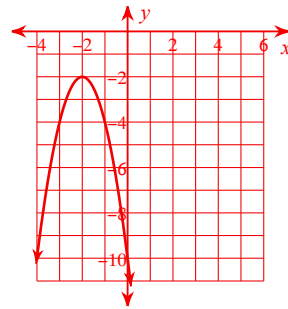
12)  $y = 2x^2 - 4x - 1$



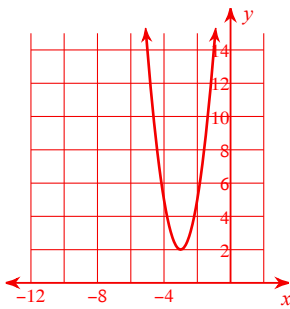
13)  $y = 2x^2 + 4x - 1$



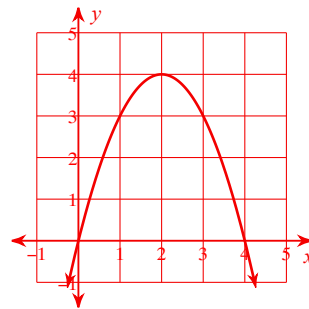
14)  $y = -2x^2 - 8x - 10$



15)  $y = 3x^2 + 18x + 29$

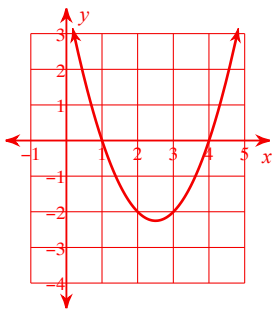


16)  $y = -x^2 + 4x$

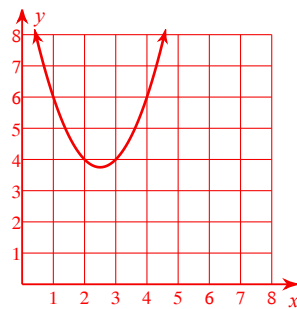


**Group #3: Sketch the graph of each function. Vertex IS NOT a lattice point.**

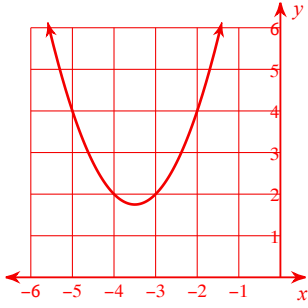
17)  $y = x^2 - 5x + 4$



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



19)  $y = x^2 + 7x + 14$



20)  $y = 3x^2 - 9x + 7$

