Graphing Quadratic Functions

$$1. f(x) = x^2$$

Vertex =

y-intercept:

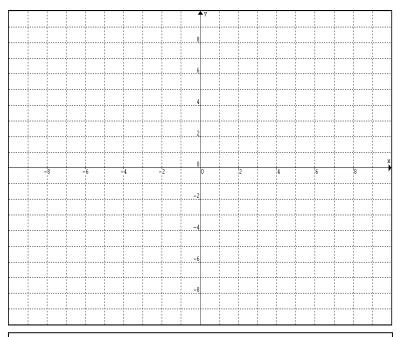
x-intercept:

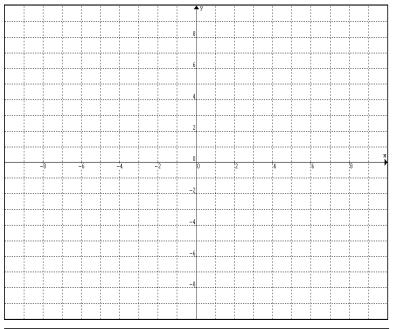
$$2. f(x) = x^2 + 5$$

Vertex =

y-intercept :

x-intercept:





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

Vertex =

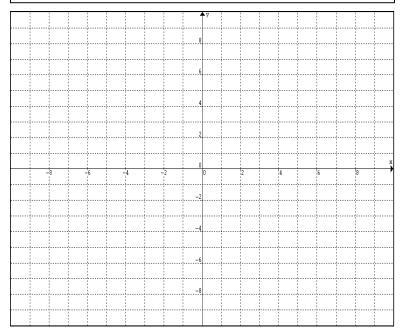
y-intercept :

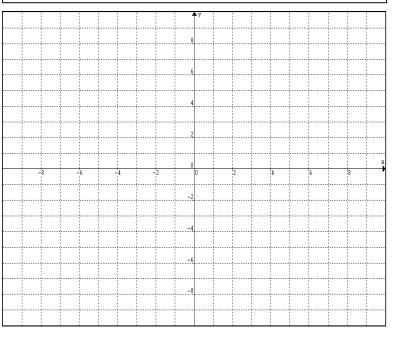
x-intercept:

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

Vertex =

y-intercept :





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

y-intercept:

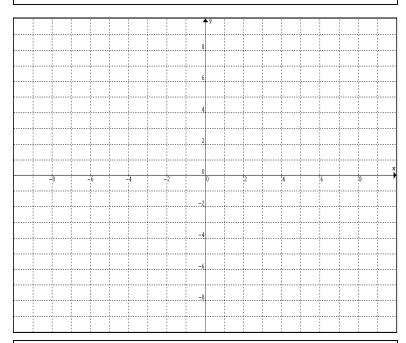
x-intercept:

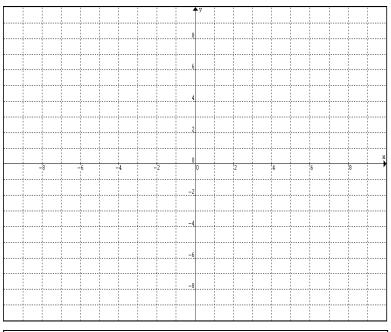
6.
$$f(x) = -x^2 + 4$$

Vertex =

y-intercept:

x-intercept:





7.
$$f(x) = -(x+3)^2$$

Vertex =

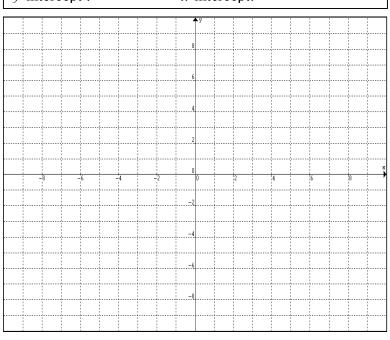
y-intercept :

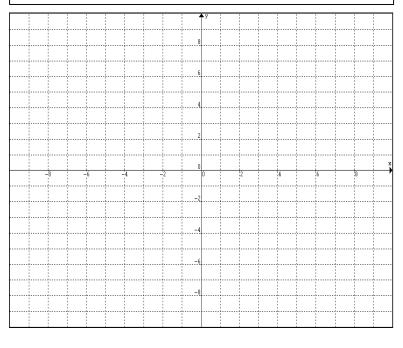
x-intercept:

8.
$$f(x) = -(x-1)^2 - 3$$

Vertex =

y-intercept :





J. $I(X) - 2X$	9.	f(x)	$=2x^{2}$
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y-intercept:

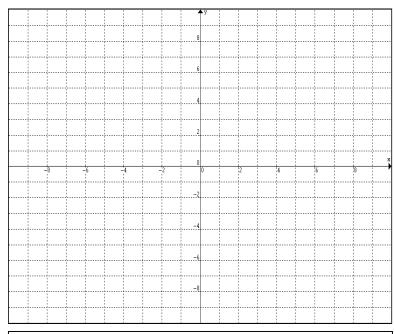
x-intercept:

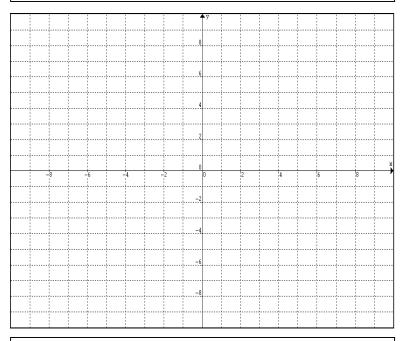
10.
$$f(x) = -2x^2$$

Vertex =

y-intercept:

x-intercept:





11.
$$f(x) = 2(x+3)^2 - 6$$

Vertex =

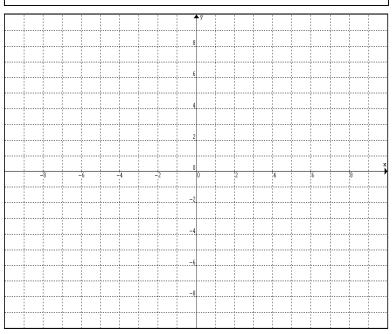
y-intercept :

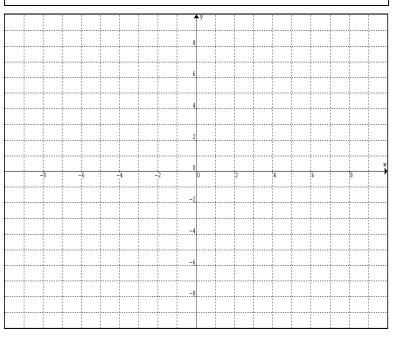
x-intercept:

12.
$$f(x) = -2(x-1)^2 - 2$$

Vertex =

y-intercept :





13.
$$f(x) = x^2 + 4x - 5$$

y-intercept :

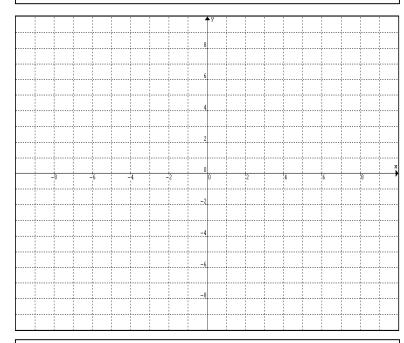
x-intercept:

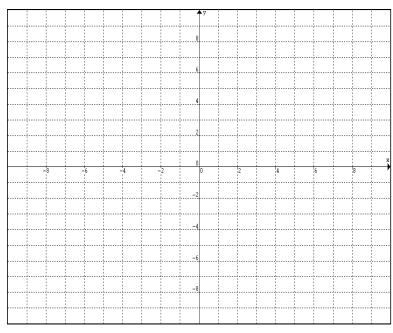
14.	f(x)	$=x^2$	+	6 <i>x</i>	+	2
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Vertex =

y-intercept :

x-intercept:





15.
$$f(x) = x^2 + 4x + 7$$

Vertex =

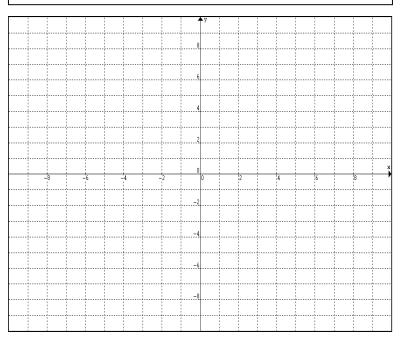
y-intercept :

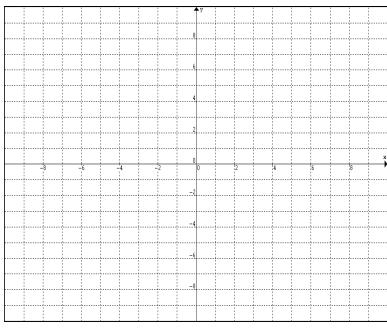
x-intercept:

16.
$$f(x) = x^2 - 6x + 2$$

Vertex =

y-intercept :





17.
$$f(x) = -x^2 + 6x - 2$$

y-intercept:

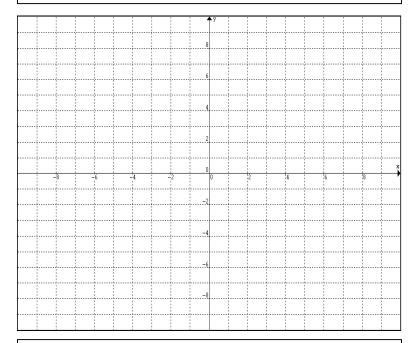
x-intercept:

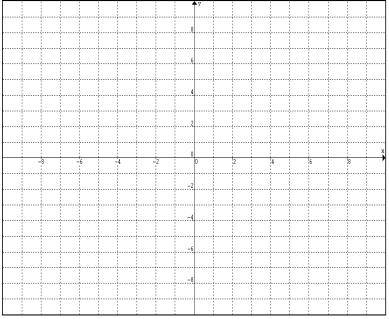
18.
$$f(x) = -x^2 - 4x - 7$$

Vertex =

y-intercept:

x-intercept:





19.
$$f(x) = -x^2 - 6x - 3$$

Vertex =

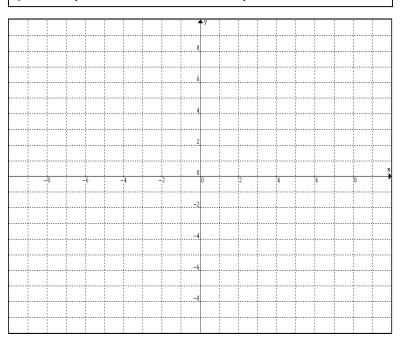
y-intercept :

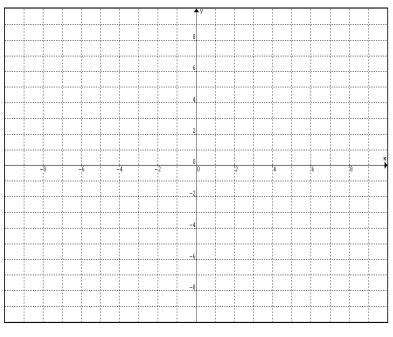
x-intercept:

20.
$$f(x) = -x^2 + 4x + 4$$

Vertex =

y-intercept :

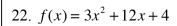




21.
$$f(x) = 2x^2 - 12x + 9$$

y-intercept :

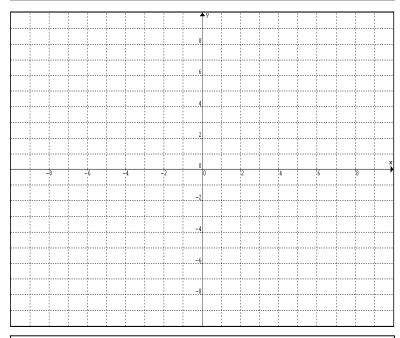
x-intercept:

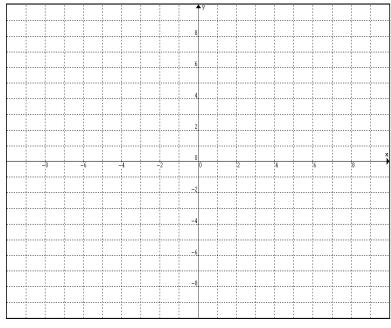


Vertex =

y-intercept :

x-intercept:





23.
$$f(x) = 4x^2 - 8x + 2$$

Vertex =

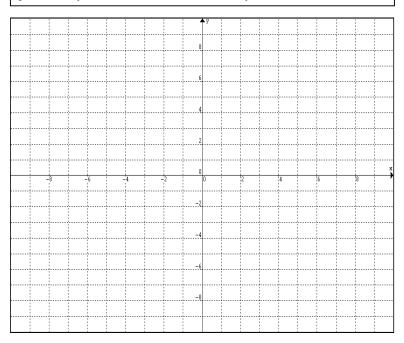
y-intercept :

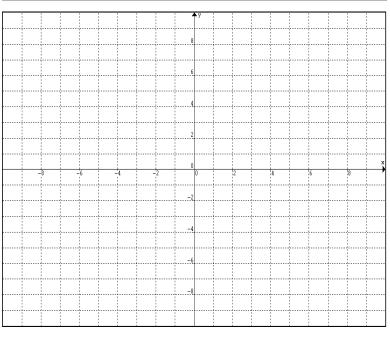
x-intercept:

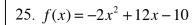
24.
$$f(x) = 2x^2 + 8x + 2$$

Vertex =

y-intercept :

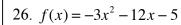






y-intercept :

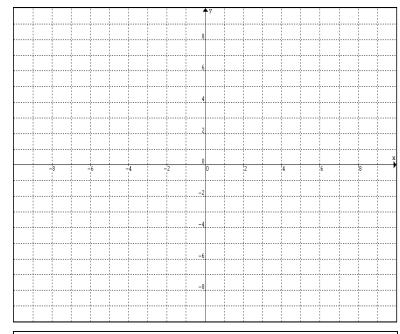
x-intercept:

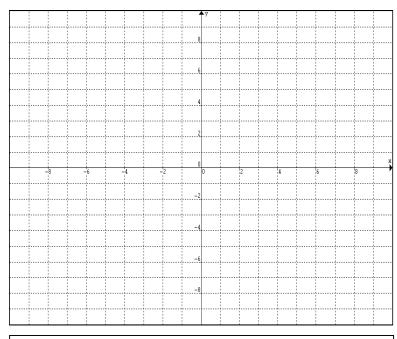


Vertex =

y-intercept :

x-intercept:





27.
$$f(x) = -3x^2 + 12x - 2$$

Vertex =

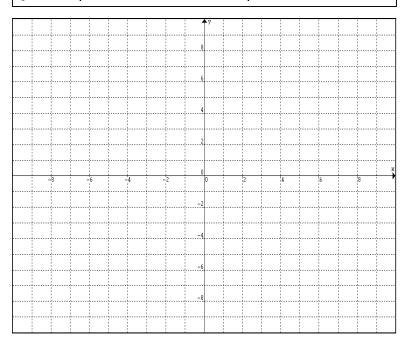
y-intercept :

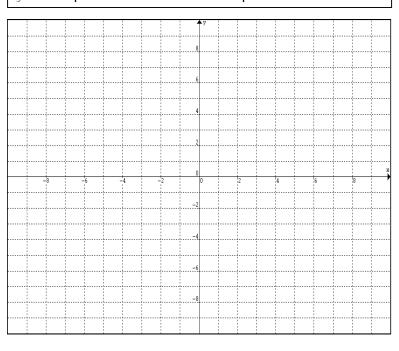
x-intercept:

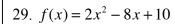
28.
$$f(x) = -4x^2 - 8x + 3$$

Vertex =

y-intercept :

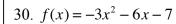






y-intercept :

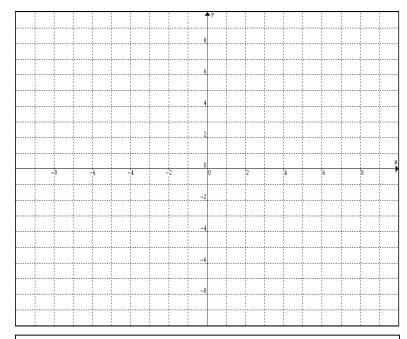
x-intercept:

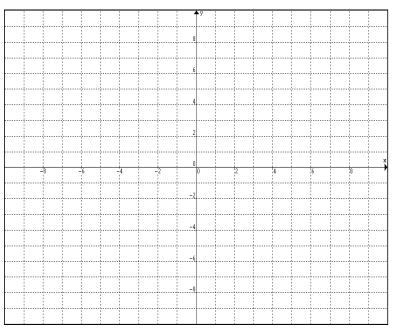


Vertex =

y-intercept :

x-intercept:





31.
$$f(x) = -2x^2 + 8x - 8$$

Vertex =

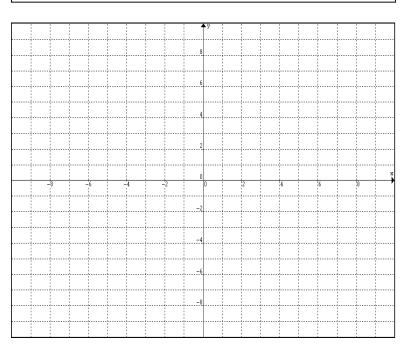
y-intercept :

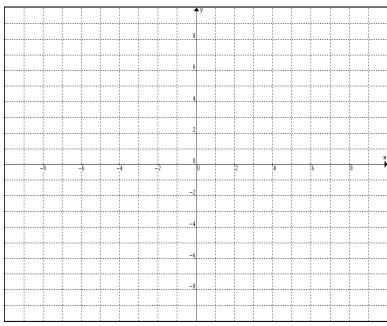
x-intercept:

32.
$$f(x) = 3x^2 + 6x + 3$$

Vertex =

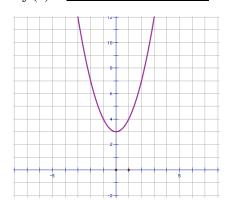
y-intercept :



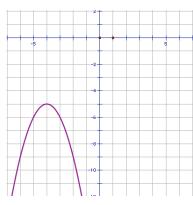


Write an equation of each graph below in the form $f(x) = a(x-h)^2 + k$.

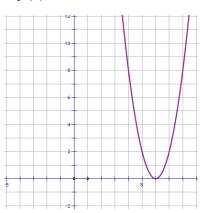
33.
$$f(x) =$$



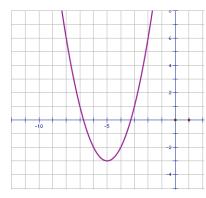
34.
$$f(x) =$$



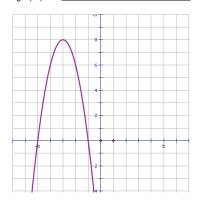
35.
$$f(x) =$$



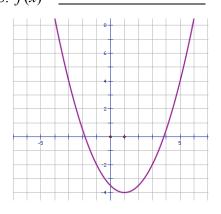
36.
$$f(x) =$$

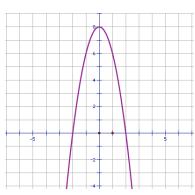


37.
$$f(x) =$$

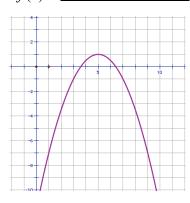


38.
$$f(x) =$$





40.
$$f(x) =$$



41.
$$f(x) =$$

