

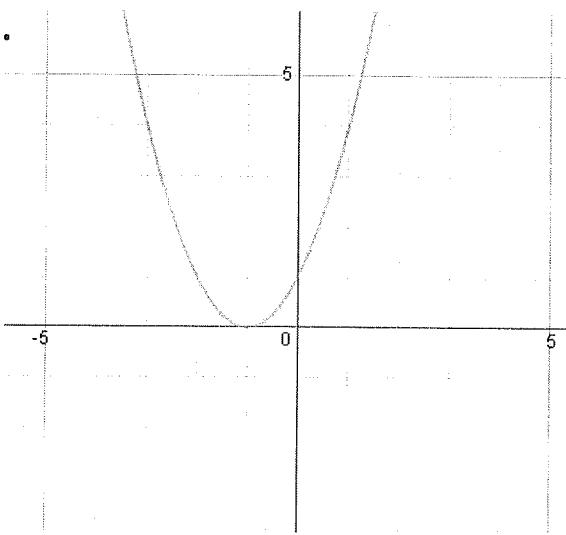
Algebra 1 Matching Activity for 9-3

Name _____ Pd _____

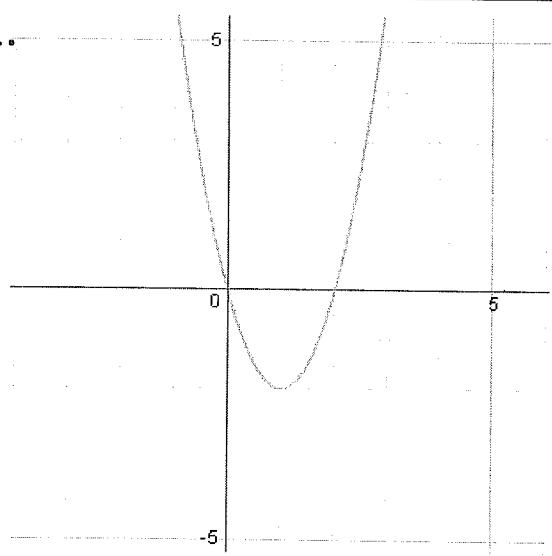
Match each graph with the equation in standard form, vertex form, factored form, the roots/zeros, and the vertex.

| Standard Form | Graph | Vertex Form | Factored Form | Roots/Zeros | Vertex |
|-----------------------------|-------|-------------|---------------|-------------|--------|
| A $y = x^2 + 2x + 1$ | | | | | |
| B $y = x^2 - 4$ | | | | | |
| C $y = 2x^2 - 4x$ | | | | | |
| D $y = x^2 - 8x + 16$ | | | | | |
| E $y = x^2 - 8x + 12$ | | | | | |
| F $y = -2x^2 - 16x - 30$ | | | | | |
| G $y = x^2 + 2x$ | | | | | |
| H $y = x^2 + 6x + 8$ | | | | | |
| I $y = -x^2 + 1$ | | | | | |
| J $y = -3x^2 + 18x - 24$ | | | | | |
| K $y = x^2 - 2x + 3$ | | | | | |
| L $y = x^2 - 2x - 8$ | | | | | |

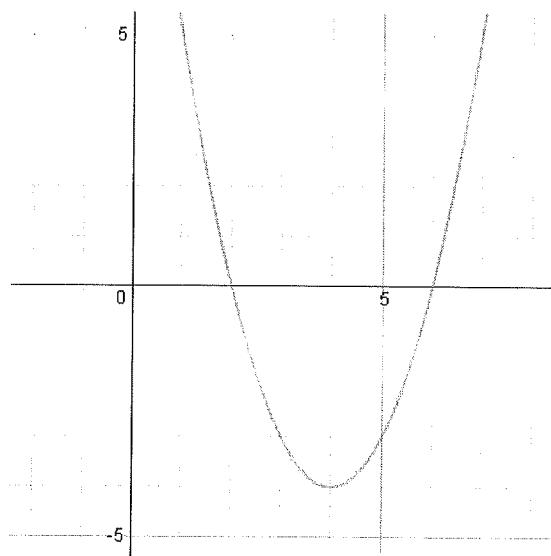
1.



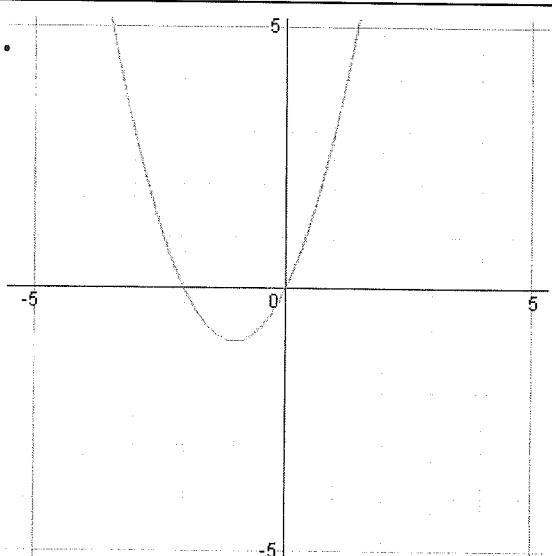
2.



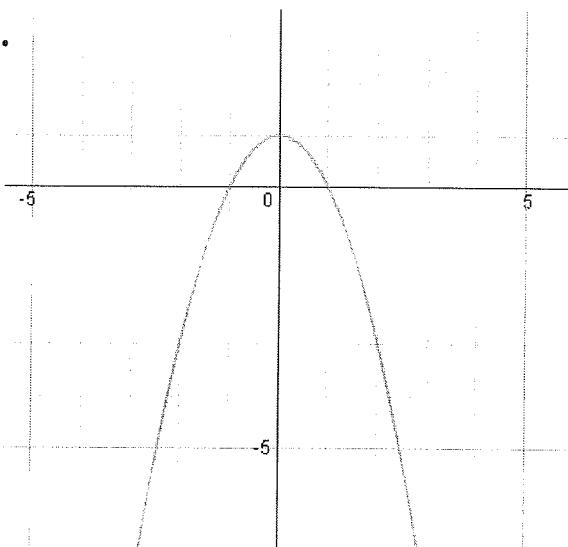
3.



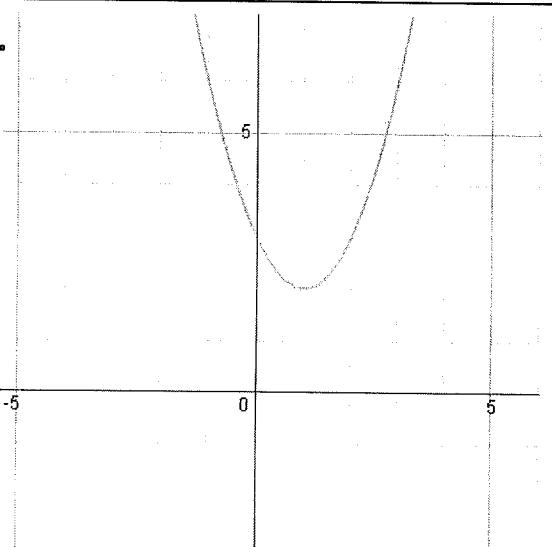
4.



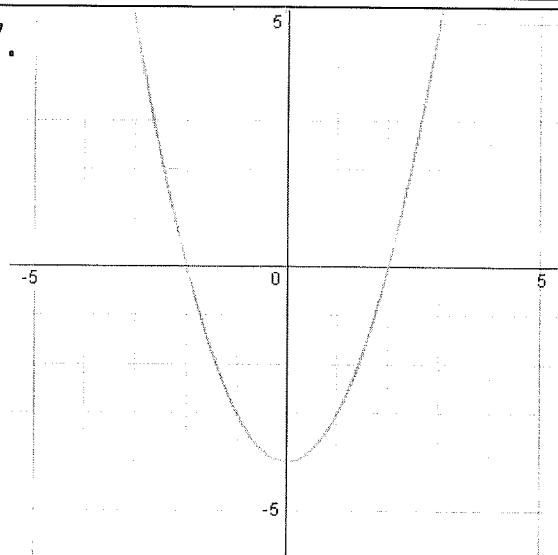
5.



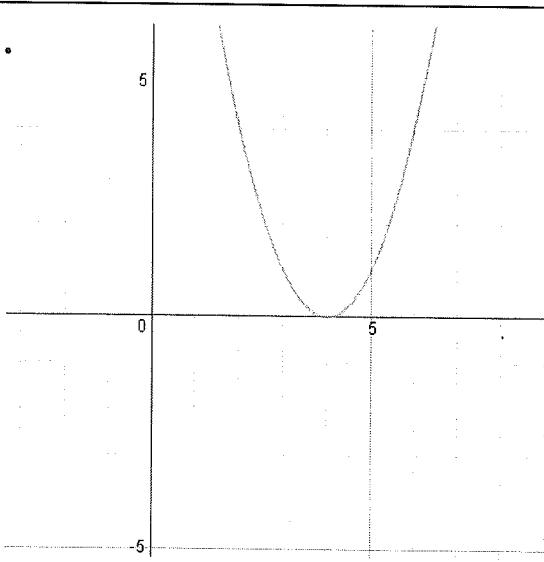
6.



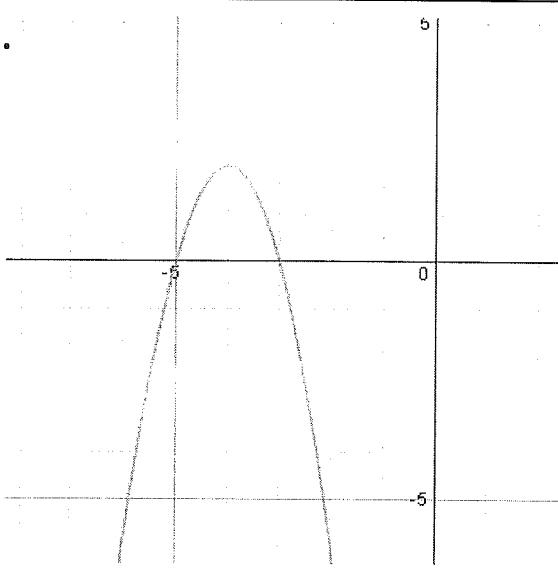
7.



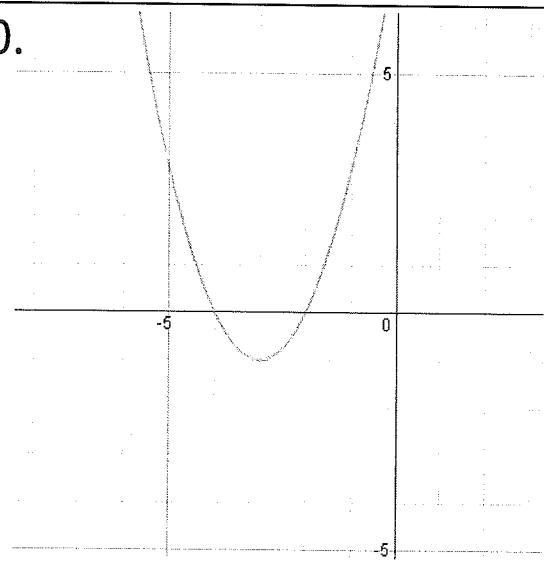
8.



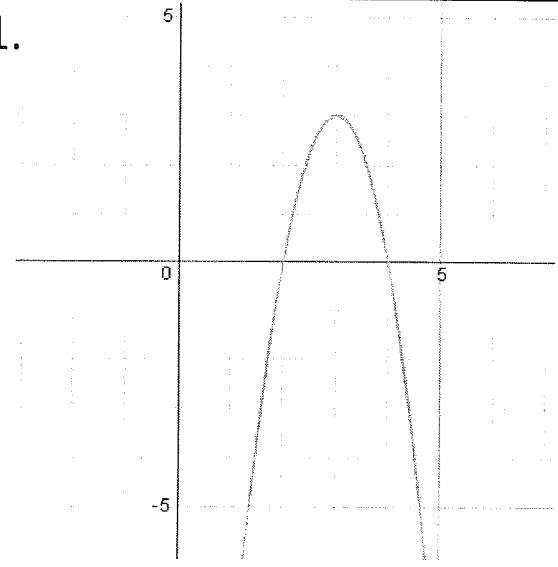
9.



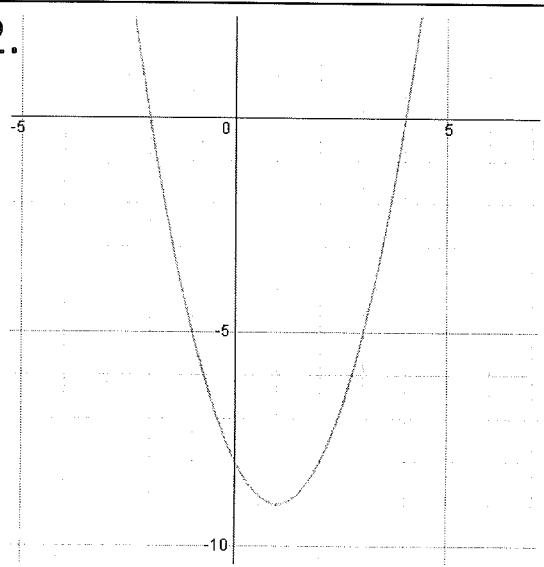
10.



11.



12.



A

$$(x + 4)(x + 2)$$

B

$$x(x + 2)$$

C

$$-3(x - 4)(x - 2)$$

D

$$-(x + 1)(x - 1)$$

E

Can't be factored

F

$$(x - 4)(x + 2)$$

G

$$(x + 2)(x - 2)$$

H

$$(x + 1)(x + 1)$$

I

$$2x(x - 2)$$

J

$$(x - 4)(x - 4)$$

K

$$(x - 6)(x - 2)$$

L

$$-2(x + 5)(x + 3)$$

Factored form

A

None

B

$x = -2$
 $x = 4$

C

$x = -1$
 $x = 1$

D

$x = 2$
 $x = 4$

E

$x = 0$
 $x = -2$

F

$x = -4$
 $x = -2$

G

$x = 2$
 $x = 6$

H

$x = -3$
 $x = -5$

I

$x = 0$
 $x = 2$

J

$x = 4$

K

$x = -1$

L

$x = 2$
 $x = -2$

zeros

A

$$(0, -4)$$

B

$$(-1, 0)$$

C

$$(1, 2)$$

D

$$(1, -9)$$

E

$$(0, 1)$$

F

$$(3, 3)$$

G

$$(-3, -1)$$

H

$$(-1, -1)$$

I

$$(4, -4)$$

J

$$(-4, 2)$$

K

$$(1, -2)$$

L

$$(4, 0)$$

Vertex