

1. Match

_____ $y = -30x^2 + 5000x - 100$

_____ $y = 30x^2 - 5000x - 100$

_____ $y = 60x^2 + 5000x - 100$

_____ $y = -30x^2 - 5000x + 100$

_____ $y = 30x^2 - 5000x + 100$

_____ $y = -30x^2 + 0.005x + 100$

_____ $y = 0.009x^2 - 500x - 1000$

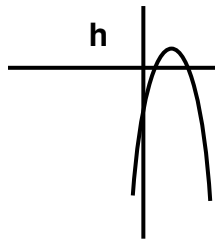
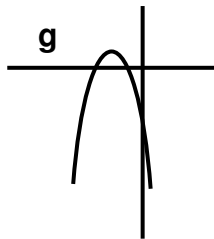
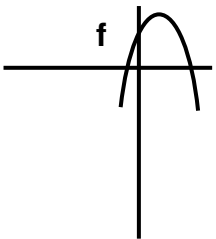
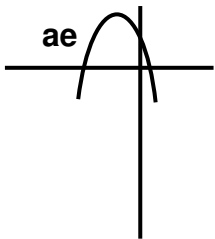
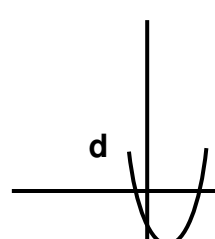
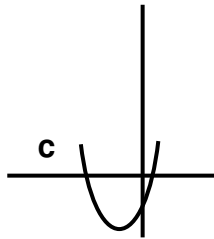
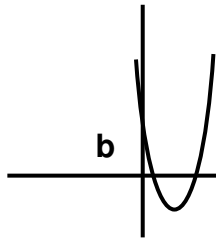
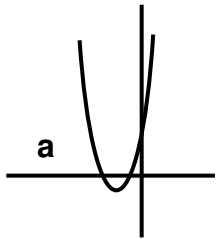
_____ $y = -0.002x^2 + 5000x - 1000$

_____ $y = 60x^2 + 0.005x - 100$

_____ $y = 30x^2 - 0.0017x - 100$

_____ $y = -30x^2 - 0.005x + 100$

_____ $y = -30x^2 - 5000x - 100$

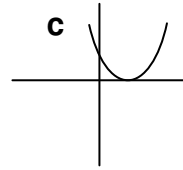
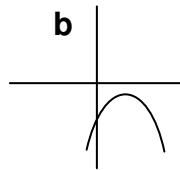
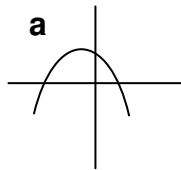


2. If $ax^2 + bx + c = 0$, match

_____ $b^2 - 4ac = 0$

_____ $b^2 - 4ac = 7$

_____ $b^2 - 4ac = -107$



3. Find the number of x-intercepts of each function

$f(x) = 2300x^2 - 2x - 7000$

$f(x) = 2.3x^2 - 0.0002x - 7000$

$f(x) = -2300x^2 - 0.2x - 7000$

$f(x) = 2.3x^2 - 2x + 7000$

$f(x) = 2300x^2 - 2000x + 7$

Rockswold 3.1

Last updated 2/6/2012

4. Sketch the graph of each function. Indicate the end-behavior, the sign of the y-intercept, the quadrant of the vertex and the number of x-intercepts.

a. $f(x) = -1500x^2 + 0.03x - 790$

b. $f(x) = -1500x^2 + 0.003x + 1$

c. $f(x) = 0.15x^2 + 30000x - 7900$

d. $f(x) = -1500x^2 - 0.03x - 790$

e. $f(x) = -1500x^2 + 0.03x - 790$

f. $f(x) = 1500x^2 + 0.03x + 790$

Answers:

1.

h	d
d	h
c	c
e	d
b	e
f	g

2. cab

3. 2, 2, none, none, 2

4.

