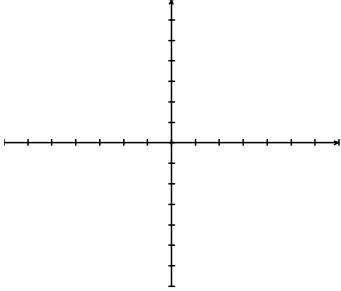


Practice Assignment

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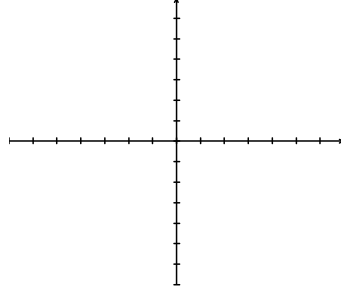
1. Sketch a quadratic function the following solutions. Then describe what the discriminant would look like:

a) no real solutions



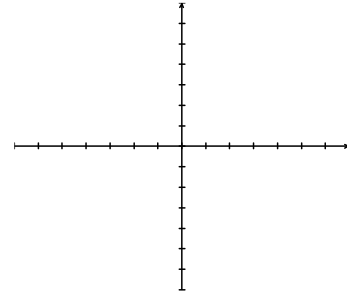
Discriminant: \_\_\_\_\_

b) one real zero



Discriminant: \_\_\_\_\_

c) two real zeros



Discriminant: \_\_\_\_\_

2. Find the discriminant for each equation, and then find the solutions.

a)  $f(x) = 4x^2 + 4x + 1$

b)  $0 = -2x^2 - 10x$

Discriminant: \_\_\_\_\_

Discriminant: \_\_\_\_\_

Number of Solutions: \_\_\_\_\_

Number of Solutions: \_\_\_\_\_

Solutions: \_\_\_\_\_

Solutions: \_\_\_\_\_

c)  $2x^2 + 4x = 7$

d)  $f(x) = x^2 - 8x - 23$

Discriminant: \_\_\_\_\_

Number of Solutions: \_\_\_\_\_

Solutions: \_\_\_\_\_

e)  $f(x) = 3x^2 + 6x + 1$

Discriminant: \_\_\_\_\_

Number of Solutions: \_\_\_\_\_

Solutions: \_\_\_\_\_

Discriminant: \_\_\_\_\_

Number of Solutions: \_\_\_\_\_

Solutions: \_\_\_\_\_

f)  $5x^2 - 10x = -5$

Discriminant: \_\_\_\_\_

Number of Solutions: \_\_\_\_\_

Solutions: \_\_\_\_\_