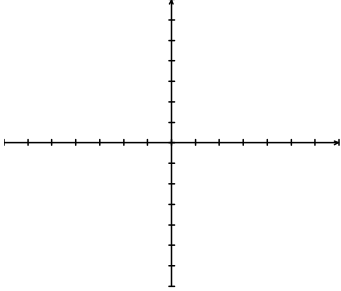**Practice Assignment**

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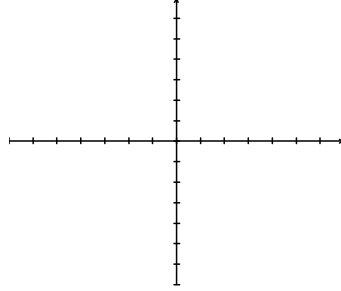1. Sketch a quadratic function the following solutions.  Then describe what the discriminant would look like:

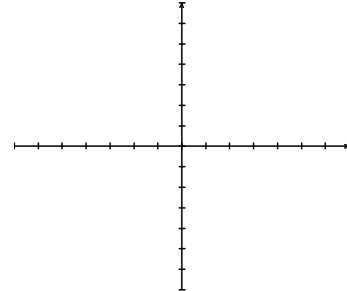   a)  no real solutions

   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: _____

Number of Solutions: _____

Solutions: _____

Discriminant: _____

Number of Solutions: _____

Solutions: _____

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

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

Discriminant: _____

Number of Solutions: _____

Solutions: _____

Discriminant: _____

Number of Solutions: _____

Solutions: _____

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

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

Discriminant: _____

Number of Solutions: _____

Solutions: _____

Discriminant: _____

Number of Solutions: _____

Solutions: _____