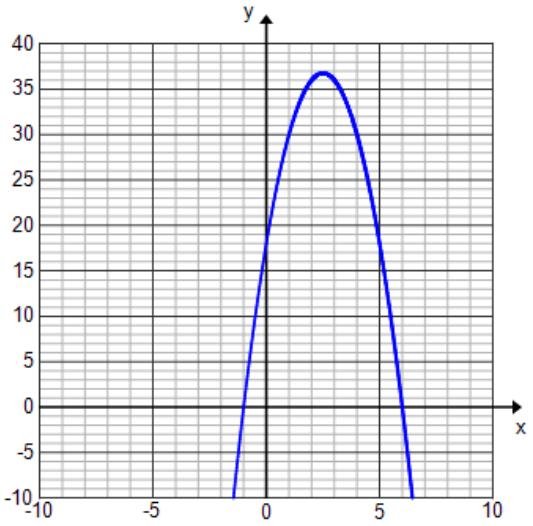
Intermediate Algebra (B) ***Name*_____**

Unit 5 Part I Mid Chapter Quiz Review ***Class period 1 2 3 4 5***

1. Use the graph to find the zeros of the quadratic function. Check that the solutions work.

$f(x) = -3x^2 \mp 15x + 18$



Solution(s):_____

Check:

For #2-5, solve by factoring. Show the factors and the answer(s).

2. $9x^2 = 24x - 12$

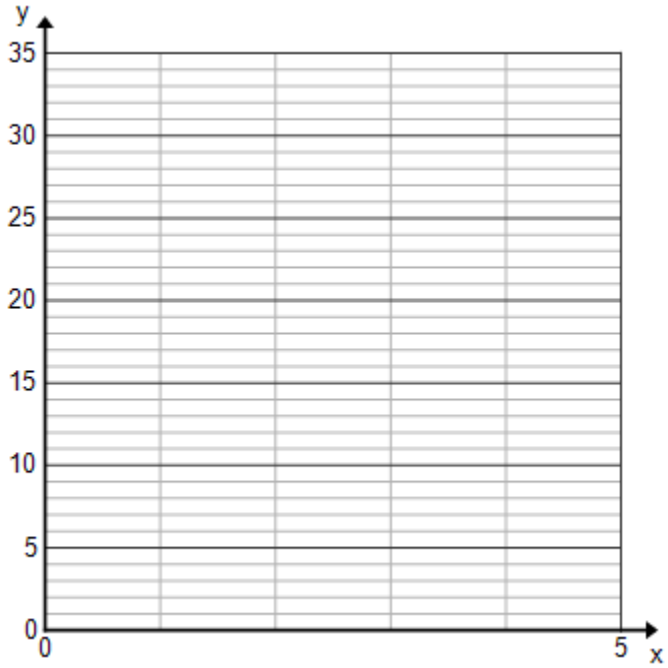
3. $-9x - 2x^2 = 4$

4. $0 = -7x - 4x^2 + 2$

5. $6x^2 + 23x = -20$

6. The arc of a basketball which is thrown at the goal (but missed) is modeled by the equation $f(x) = -16x + 34x + 6$. Round to two decimal places when answering the following questions:

a) Graph (accurately) the equation in the following space.



b) What is the height of the ball after 1 second?

c) How high does the ball get?

d) How long does it take it to get that high?

e) How long was the air in the ball?