

Math 1010  
Test problems:

September 11, 2017  
2.3 # 1-93 alt. odds

Homework 9  
2.4 # 5, 7, 11, 27

1) Solve by factoring:  $x^2 - 13x + 40 = 0$

2) Solve by completing the square:  $x^2 - 8x - 1 = 0$

3) State the quadratic formula for solving  $ax^2 + bx + c = 0$

4) Solve using the quadratic formula:  $3.1x^2 - 4.6x - 11.7 = 0$

5) The perimeter of a rectangular field is 772 ft, and the area is 21,120 square ft. What are the dimensions of the field? Use algebra!

HINT: Let  $x$  be one dimension, then the other dimension is half the perimeter minus  $x$ . The product of  $x$  and the other dimension is the area, and this will form a quadratic equation which you can solve. You will get two solutions to the equation, but both solutions give you the same answer to the question.