

Math 1050, Problem Set #1**Name:**Due: Wednesday, July 7th. *Show all work for partial credit!*

1. Find all solutions to the following linear equations.

(a) $5t + 6 = -18 - t.$

(b) $3(2 - x) = 2x - 1$

2. Eliminate denominators to solve the following equations.

(a) $\frac{1}{2}x - 5 = \frac{3}{4}x$

(b) $\frac{2}{x+3} = \frac{-6}{x+3} - 2$

3. Solve the quadratic equation $6x^2 - 7x = 5$ by factoring the equation equal to zero.

4. Solve the quadratic equation $x^2 - 8x = 10$ by completing the square. Give an exact answer, not a decimal approximation.

5. Use the quadratic formula to find all solutions to $2 = t + 6t^2$. Give an exact solution, not a decimal approximation.