

Name: \_\_\_\_\_

Math 111 Intro to Math Methods and Applications – Crawford

Quiz 2

21 October 2016

Books and notes (in any form) are not allowed. You may use a calculator. *Show all your work for full credit.*  
Good Luck!

1. (4 pts) Perform the indicated operation and simplify.

$$\frac{x+1}{x^2-x} - \frac{3}{x^2-2x+1}$$

2. (4 pts) Simplify the complex fraction.

$$\frac{\frac{5}{3y}}{\frac{1}{3} - y}$$

3. (4 pts) Solve the following equation.

$$3(x-4) = 4 - 2x$$

4. (4 pts) Solve the following fractional equation. Check your answer and clearly state if there is no solution.

$$\frac{2x}{x-3} = 4 + \frac{6}{x-3}$$

5. (4 pts) Sheldon wants to purchase tickets for the new Star Wars movie. The online site charges \$14.75 per ticket and a one time processing fee of \$3.00.

(a). Define the variable  $x$  in words: Let  $x$  be \_\_\_\_\_

(b). Write an expression for how much it would cost to purchase  $x$  tickets.

(c). How much would you pay to buy 4 tickets?

(d). If he has \$100 to spend on tickets, how many can he get?