

Math 134 Spring 2018  
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Homework Quiz 1

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

Show all your work and simplify your answers unless otherwise specified. If you do not turn in a rewrite within a week (or after the fifth attempt), your score will be solidified.

1. Simplify the following expression. Show your work.

$$\frac{2}{3} - \frac{19}{21}$$

2. Consider the following expression.

$$2[(x^2 - 3) + x(3x - 1)] - (2 - 4x) + 1$$

- (a) Simplify the expression.

- (b) Evaluate the expression for  $x = -3$ .

3. Lee recently competed in a triathlon and spent  $r$  minutes running. He spent 10 fewer minutes swimming than twice the amount of time it took to run, and he completed the cycling portion in 47 minutes. His total time spent on the triathlon is given by the expression  $r + (2r - 10) + 47$ . If he spent 33 minutes running, how long did it take him to complete the triathlon?

4. The following expression converts temperature in Fahrenheit to Celsius.

$$\frac{5(F - 32)}{9}$$

Use this expression to convert  $93^\circ F$  to Celsius.