

235 Quiz R

Name: _____

January 13, 2013

*You have 30 minutes to complete this quiz. Notebooks are not permitted.**When you are finished you may leave or you can stay to ask questions after the quiz.*

1. Determine whether each of the following statements is true or false.

T **F** $\frac{a}{b+c} = \frac{a}{b} + \frac{a}{c}$

T **F** $(x^2)^3 = x^6$

T **F** $\frac{\frac{a}{b}}{c} = \frac{a}{bc}$

T **F** $\sqrt{x^2+9} = x+3$

T **F** The product of two rational numbers is always a rational number.

2. Fill in the blanks. You may write your work between the problems if you like, but I only be grading what you record in the blanks on the left.

_____ Write the solution to $|x-5| < 2$ in interval notation.

_____ If the exponential function $f(x) = Ca^x$ passes through the points $(0, 5)$ and $(3, 40)$, then what is the value of a ?

_____ What integer is equal to $\log_2 8$?

_____ What is the value of $\sin(-\frac{5\pi}{6})$?

_____ What is the unique acute angle θ that satisfies $\cot \theta = 1$?