

**Quiz #1**

MATH 105 – Amber Buntin – Fall 2015

Please **show as many algebraic steps as possible** while simplifying, evaluating, and solving.

1. Given  $f(x) = \begin{cases} -4x - 32 & \text{if } x < -3 \\ 2x^2 - 3x + 5 & \text{if } x \geq -3 \end{cases}$ , find

a.  $f(-6)$

b.  $f(-3)$

2. Find the equation of the line through  $(5, -6)$  with a slope of  $-\frac{7}{6}$ . Leave answer in slope-intercept form and reduce ALL fractions to lowest terms (no decimals).