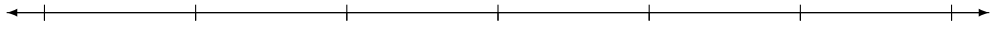
MATH 135: Quiz 1

September 9, 2014

Name: _____ Sec: _____

1. Solve the following absolute value inequality and graph the result on the number line below.

$$|3x - 4| \leq 20$$



2. Given the two functions f and g below, find both the composites $f \circ g$ and $g \circ f$. Make sure they are labeled carefully.

$$f(x) = \tan(x + 1) \qquad g(x) = x^2 + 3$$

3.

(a) Find the equation of the line that passes through the points $(1, 4)$ and $(-1, 0)$.

(b) Find the equation of the line perpendicular to the one in (a) that also passes through $(-1, 0)$.