

# 8th grade homework #1

Due Date: Sept. 22, 2013

1. What's the first time after 10 o'clock at which the minute hand and hour hand of a clock point in the exact same direction.
2.  $x = \sqrt{\frac{6}{7}}$ , evaluate  $(x + \frac{1}{x})^2 = ?$
3.  $\frac{x}{y} = \frac{2}{3}$     $\frac{y}{z} = \frac{7}{5}$     $\frac{z}{x} = ?$
4.  $\frac{10x + 3y}{13x + 2y} = \frac{3}{5}$     $\frac{x}{y} = ?$
5.  $2^x = 6$     $2^{3x-1} = ?$