Print Name: _____ Circle Section Time: 10 or 11

Math 1100 **Quiz 5** **NO CALCULATORS**

1. [5 points] Solve the inequatity $-2 \leq 4x + 2 < 5$. Express your answer in interval notation and graph it on the real number line.

2. [5 points] Solve the inequatity $(2x - 1)(x + 3) > 0$. Express your answer in interval notation and graph it on the real number line.

3. [12 points] (a) [6 points] Graph these two lines on the same grid: $\begin{cases} \text{Line 1:} & 3x + 2y = 6 \\ \text{Line 2:} & 2x = 4y - 8 \end{cases}$.

   (b) [1 point] Use your graphs to estimate the interval on the x-axis where the y-values of Line 1 are above ($>$) Line 2.

   (c) [5 points] Use algebra to find this interval exactly.