Math 1010 - Quiz 1

University of Utah
Fall 2009

Name: Solutions
1. (3 points) Draw a number line below, and plot and label the points 
   $-3$, $0$, and $1$.

   \[ \begin{array}{cccccc}
   -4 & -3 & -2 & -1 & 0 & 1 & 2 & 3 & 4 \\
   \end{array} \]

   Evaluate the expressions in the next three problems.

2. (3 points) $5 - (-12) = ?$

   \[ 5 - (-12) = 5 + 12 = 17 \]

3. (3 points) $\left( -\frac{4}{9} \right) \left( \frac{3}{2} \right) = ?$

   \[ \left( -\frac{4}{9} \right) \left( \frac{3}{2} \right) = \left( -\frac{2}{3} \right) \left( 1 \right) = -\frac{2}{3} \]
4. (4 points) $2\frac{1}{4} + 5\frac{1}{5} = \, ?$

\[
2\frac{1}{4} + 5\frac{1}{5} = \frac{9}{4} + \frac{26}{5} = \frac{45}{20} + \frac{104}{20} = \frac{149}{20} = \frac{7}{20}
\]

*Note* - Either $\frac{149}{20}$ or $\frac{7}{20}$ would be accepted as a correct answer.

5. (2 points)
What property of real numbers is expressed by the equation:

\[a(b + c) = ab + ac\]

The *distributive property.*