

# Math 1303 - Math in the Liberal Arts

Quiz #10 - 2005.10.19

Solutions

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1. Solve the following equation for the unknown variable.

$$\frac{2}{3}(x + 4) - \frac{1}{4} = 2(x - 7) + 4$$

Expanding both sides gives

$$\frac{2}{3}x + \frac{29}{12} = 2x - 10$$

Multiplying both sides by 12 gives

$$8x + 29 = 24x - 120$$

Placing all terms which have an  $x$  in them on one side gives

$$149 = 16x$$

dividing both sides by 16 gives

$$x = \frac{149}{16}$$

2. Determine if the following equation is true:

$a \cdot$