

Test Wednesday, March 2, 2016

Warm-Up

$$1) \frac{2w}{3} = 12 + \frac{2w}{7}$$

$$\frac{42w}{3} = 252 + \frac{42w}{7}$$

$$14w = 252 + 6w$$

$$14w - 6w = 252 + \boxed{6w - 6w}$$

$$\frac{8w}{8} = \frac{252}{8}$$

$$w = 31.5$$

$$2) 4.2(1.75a - 3.2) = 3.9(1.5a + 4.6)$$

$$4.2(1.75a - 3.2) = 3.9(1.5a + 4.6)$$

$$7.35a - 13.44 = 5.85a + 17.94$$

$$7.35a - 5.85a - 13.44 = \boxed{5.85a - 5.85a} + 17.94$$

$$1.5a - 13.44 = 17.94$$

$$1.5a \boxed{-13.44 + 13.44} = 17.94 + 13.44$$

$$\frac{1.5a}{1.5} = \frac{31.58}{1.5}$$

$$a = 20.92$$

Solve and graph the following:

$$6(5 - x) \leq 7(x - 5)$$

$$30 - 6x \leq 7x - 35$$

$$30 - 6x - 7x \leq \boxed{7x - 7x} - 35$$

$$\boxed{30 - 13x \leq -35}$$

$$\boxed{30 - 30} - 13x \leq -35 - 30$$

$$\frac{-13x}{-13} \leq \frac{-65}{-13}$$

$$x \geq 5$$



Solve and Graph:

$$\overset{(4)}{\frac{3}{4}}x + 8 \leq \overset{(4)}{\frac{1}{2}} \overset{(4)}{(3x - 5)}$$

$$\frac{12x}{4} + 32 \leq \frac{4}{2}(3x - 5)$$

$$\boxed{3x + 32 \leq 2(3x - 5)}$$

$$3x + 32 \leq 6x - 10$$

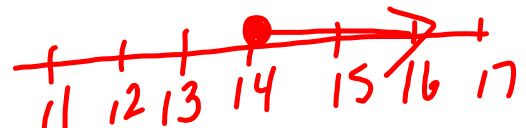
$$3x - 6x + 32 \leq \boxed{6x - 6x} - 10$$

$$-3x + 32 \leq -10$$

$$-3x + 32 - 32 \leq -10 - 32$$

$$\frac{-3x}{-3} \leq \frac{-42}{-3}$$

$$x \geq 14$$



The following are the wages for two summer jobs building grain bins.

Job A: \$60 per bin plus \$120 per day

Job B: \$75 per bin plus \$90 per day

Write and solve an inequality to determine how many grain bins you would need to build each day to make Job B pay more than Job A.

Let "x" represent # of bins

$$\begin{array}{r} \text{Job A} \qquad \qquad \qquad \text{Job B} \\ 60x + 120 < 75x + 90 \\ 60x - 75x + 120 < \boxed{75x - 75x} + 90 \\ -15x + 120 < 90 \\ -15x + 120 - 120 < 90 - 120 \\ \frac{-15x}{-15} < \frac{-30}{-15} \\ x > 2 \end{array}$$

Test Practice

Textbook--- Page 308 3, 4, 7

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Practice Test

Page 310 2, 3, 4

