**FEBRUARY 15, 2016**

**UNIT 5:    LINEAR EQUATIONS AND
                    INEQUALITIES**

**SECTION 6.1:
SOLVING EQUATIONS BY
USING INVERSE
OPERATIONS**

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*MATH 9*

**WHAT'S THE POINT OF TODAY'S LESSON?**

We will continue working on the Math 9 Specific Curriculum Outcome (SCO) "Patterns and Relations 3" OR "PR3" which states:

"Model and solve problems using linear equations in a variety of forms ($ax = b$ ; $ax + b = c$ ; $ax + b = cx + d$ ; $a(bx + c) = d(ex + f)$ etc.) concretely, pictorially and symbolically where a, b, c, d, e and f are rational numbers."

**SOLVE AND VERIFY THE FOLLOWING EQUATION:**

$$\frac{3}{5} - 4p = \frac{67}{6}$$

$\text{LCM} = 30$

$$\overset{6}{\cancel{30}}\left(\frac{3}{\underset{1}{5}}\right) - 30(4p) = \overset{5}{\cancel{30}}\left(\frac{67}{\underset{1}{6}}\right)$$

$$18 - 120p = 335$$

$$18 - 120p - 18 = 335 - 18$$

$$-120p = 317$$

$$\frac{-120p}{-120} = \frac{317}{-120}$$

$$p = -\frac{317}{120}$$

| LS | RS |
|---|---|
| $\frac{3}{5} - 4p$ | $\frac{67}{6}$ |
| $\frac{3}{5} - \overset{1}{\cancel{4}}\left(-\frac{317}{\underset{30}{120}}\right)$ | |
| $\frac{3}{5} + \left(\frac{-317}{30}\right)$ | |
| $\frac{18}{30} + \frac{317}{30}$ | |
| $\frac{335}{30} \overset{\div 5}{\underset{\div 5}{}}$ | |
| $\frac{67}{6}$ | |

$$LS = RS \therefore p = \frac{-317}{120}.$$

**HOMEWORK QUESTIONS???**
**(page 274, #20, #22 and #24;** d
**page 286, #4 and #5)**

24. d) $\dfrac{22}{8} + 10g = \dfrac{62}{5}$     LCM = 40

$\overset{5}{\cancel{40}}_{\overset{}{1}}\left(\dfrac{22}{\underset{1}{8}}\right) + 40(10g) = \overset{8}{\cancel{40}}_{\overset{}{1}}\left(\dfrac{62}{\underset{1}{5}}\right)$

$110 + 400g = 496$

$110 + 400g - 110 = 496 - 110$

$\dfrac{400g}{400} = \dfrac{386}{400} \overset{\div 2}{\underset{\div 2}{}}$

$g = \dfrac{193}{200}$

**CONCEPT REINFORCEMENT:**

*WORKSHEET* (ax + b = c):  **#1 TO #16**

**Please don't forget to check your answers on the back of the sheet - this is part of your homework.**

**HEADS UP - QUIZ TOMORROW!  There will be a short quiz on Section 6.1 tomorrow, Feb. 16, on one-step and two-step equations, the distributive property, equations with one denominator and two denominators and verifications.**