

FEBRUARY 10, 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."

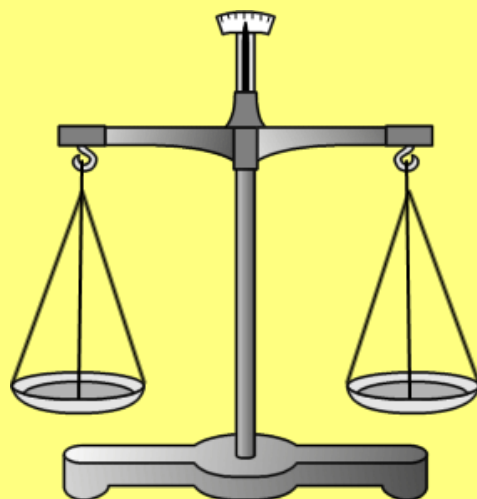


What does THAT mean???

SCO PR3 means ALGEBRA!!!



ALGEBRA IS A "BALANCING ACT"...



WARM UP:

SOLVE AND VERIFY THE FOLLOWING EQUATIONS:

1. $5x - 10 = -80$

$$5x - 10 + 10 = -80 + 10$$

$$\frac{5x}{5} = \frac{-70}{5}$$

$$x = -14$$

LS	RS
$5x - 10$	-80
$5(-14) - 10$	
$-70 - 10$	
-80	

$$LS = RS \therefore x = -14.$$

2. $\frac{m}{3} + 7 = -9$

$$\frac{m}{3} + 7 - 7 = -9 - 7$$

$$\frac{m}{3} = -16$$

$$\cancel{3} \left(\frac{m}{\cancel{3}} \right) = \cancel{3} (-16)$$

$$m = -48$$

LS	RS
$\frac{m}{3} + 7$	-9
$\frac{-48}{3} + 7$	
$-16 + 7$	
-9	

$$LS = RS \therefore m = -48.$$

**SOLUTIONS TO WORKSHEETS COMPLETED
AS HOMEWORK LAST NIGHT:**

"Books Never Written"

Answers: *The Break-in* by Jimmy D. Lock
Origin of Man by Eva Lu Shun
Making Soap by Phil T. Hans

"Why Did Gonzo Walk Around..."

Answer: "He was chilling two birds with one cone."

Sheet - "Why Did Gonzo..."

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$$\textcircled{1} \quad \frac{1}{3}x + 5 = 9$$

$$\frac{1}{3}x + 5 - 5 = 9 - 5$$

$$\frac{1}{3}x = 4$$

$$\cancel{\frac{3}{1}} \left(\frac{1}{\cancel{3}} x \right) = 3(4)$$

$$x = 12$$

$$\begin{aligned} & \frac{1}{3}x \\ &= \frac{1}{3} \left(\frac{x}{1} \right) \\ &= \frac{x}{3} \end{aligned}$$

$$\textcircled{5} \quad 9 - 4m = 19$$

$$\textcircled{9} - 4m - \textcircled{9} = 19 - 9$$

$$\frac{-4m}{-4} = \frac{10}{-4}$$

$$m = -2\frac{2}{4}$$

$$m = -2\frac{1}{2}$$

LS	RS
$9 - 4m$	19
$9 - 4(-2\frac{1}{2})$	
$9 - \cancel{4} \left(\begin{matrix} 2 & -5 \\ -1 & 2 \end{matrix} \right)$	
$9 + 10$	
19	

$$LS = RS \therefore m = -2\frac{1}{2}.$$

CONCEPT REINFORCEMENT:

**Worksheets: "Why Did Gonzo Walk Around..."
(please do 5 verifications)**

HEADS UP - QUIZ SOON!!! There will be a short quiz on Section 6.1 once we have completed it, probably around Feb. 15. This will involve one-step and two-step equations, the distributive property, equations with one denominator and two denominators and verifications.