

MATH PROJECT

OCTOBER 12, 2015

SEVENTH PERIOD

PARKER, HOLLY, AND KORBYN

IN THIS GOOGLE PRESENTATION, WE WILL BE SHOWING EXAMPLES OF THE STEPS AND ANSWERS OF EQUATIONS. MRS. HENRY'S 8TH GRADE MATH CLASS HAS BEEN LEARNING AND UNDERSTANDING EQUATIONS FOR THE FIRST 9 WEEK PERIOD. THIS INCLUDES PROPERTIES OF REAL NUMBERS AND PROPERTIES OF EQUALITY. AN EQUATION IS A STATEMENT THAT THE VALUES OF TWO MATHEMATICAL EXPRESSIONS ARE EQUAL.

EQUATION ONE:

$$4x = \frac{2}{5} \gg \text{USE THE MULTIPLICATIVE INVERSE}$$

$$\frac{1}{4} \text{TIMES } 4x / 1 = \frac{2}{5} \text{TIMES } \frac{1}{4} \gg \text{DO THE MULTIPLICATIVE INVERSE ON BOTH SIDES}$$

$$x = \frac{2}{20} \text{ REDUCES TO } \frac{1}{10}$$

$$x = \frac{1}{10}$$

EQUATION TWO:

$$x - 1/4 = 2/5 \gg \text{ADD } 1/4 \text{ FROM BOTH SIDES}$$

$$+1/4 = +1/4$$

$$2/5 + 1/4 = 13/20$$

$$x = 13/20$$

EQUATION THREE:

$$\cancel{15} - 2/3x = 20 \gg \text{USE THE SUBTRACTION PROPERTY OF EQUALITY}$$

$$\cancel{-15} \quad \quad \cancel{-15} \gg \text{SUBTRACT 15}$$

$$-2/3x = 5 \gg \text{USE THE MULTIPLICATIVE INVERSE}$$

$$-3/2 \text{ TIMES } -2/3x = 5 \text{ TIMES } -3/2$$

$$x = -15/2$$

$$x = -7.5$$

$$x = -7.5$$

EQUATION FOUR:

$$5 - 2(x - 3) = -23 \quad \gg \text{ USE THE DISTRIBUTIVE PROPERTY}$$

$$5 - 2x + 6 = -23 \quad \gg \text{ SUBTRACT 6 FROM BOTH SIDES}$$

$$\begin{array}{r} -6 = -6 \\ \hline \end{array}$$

$$5 - 2x = -29 \quad \gg \text{ SUBTRACT 5 FROM BOTH SIDES}$$

$$\begin{array}{r} -5 = -5 \\ \hline \end{array}$$

$$-2x = -34 \quad \gg \text{ NOW DIVIDE } -2 \text{ FROM EACH SIDE}$$

$$\begin{array}{r} /-2 = /-2 \\ \hline \end{array}$$

$$x = 17$$

THE SMITH'S NEEDED A MOVING VAN. KPH MOVERS CHARGE \$90 PER HOUR PLUS A \$50 TRUCK FEE. STAR MOVING COMPANY CHARGES \$70 PER HOUR PLUS A \$90 TRUCK FEE. AT WHAT NUMBER OF HOURS WILL THE COST FOR BOTH COMPANIES BE THE SAME?

EQUATION >> $90H + 50 = 70H + 90$

SOLVING THE EQUATION >> $90H + 50 = 70H + 90$ >> USE THE SUBTRACTION PROPERTY

$$\begin{array}{r} -50 \quad -50 \\ \hline 90H = 70H + 40 \end{array} \gg \text{SUBTRACT 50}$$

$$\begin{array}{r} -70H \\ \hline 20H = 40 \end{array} \gg \text{SUBTRACT 70H}$$

$$20H = 40$$

$$\begin{array}{r} 20 \quad 20 \\ \hline 40 \end{array} \gg \text{DIVIDE BY 20}$$

40 DIVIDED BY 20 EQUALS 2

$$H = 2$$

EXPLANATION FOR SLIDE SEVEN

AT TWO HOURS KPH MOVING AND STAR MOVING WOULD BE THE SAME.

SUBTRACTION PROPERTY>> STATES THAT WHEN BOTH SIDES OF AN EQUATION HAVE THE SAME NUMBER SUBTRACTED FROM THEM, THE REMAINING EXPRESSIONS ARE STILL EQUAL.

MULTIPLICATIVE INVERSE>> ANOTHER NAME FOR RECIPROCAL. WHEN YOU MULTIPLY A NUMBER BY ITS "MULTIPLICATIVE INVERSE" YOU GET 1.