

0-4 Solving Linear and Multi-Step Equations

28&29Aug

Bellwork 29Aug2019

- 1) $\frac{5}{6} \square \frac{2}{9}$ Find the sum, difference, product, and quotient

2) $\frac{5x}{6} \times \frac{2}{9}$

Solve for x
 $x = \frac{4}{15}$

$$45x = 12$$

$$x = \frac{12}{45} \rightarrow \frac{4}{15}$$

- 3) Explain in words how you would solve this problem:

$$4 + \overbrace{7 \cdot (-3) \cdot 6}$$

$$-126 + 4 = -122$$

29Aug2019 Wed

0-4: Linear and Multi-Step Equations

$$1 - 4v + 2v = 3$$

① Combine like terms

$$1 - 2v = 3$$

② Isolate variable by
UNDOING OPERATIONS

$$\begin{array}{l}
 1 - 2 \cdot v = 3 \\
 -2 \cdot v = 2 \\
 v = -1
 \end{array}
 \quad \leftarrow \quad
 \begin{array}{l}
 \frac{1 - 2v}{2} = \frac{3}{2} \\
 \frac{1}{2} - \frac{2}{2}v = \frac{3}{2} \\
 \frac{1}{2} - v = \frac{3}{2} - \frac{1}{2} \\
 -\frac{1}{2} \quad \quad \quad \frac{4}{2} \quad \frac{2}{2} \\
 -v = \frac{2}{2} \\
 v = 1
 \end{array}$$

Divide all terms

Today:

- 1) One whiteboard per table
- 2) Write down the problem from smartboard in your own notes, solve yourself
- 3) Answer question on whiteboard- EVERYONE in group must agree (agree with the logic, maybe it's not what you have written, but make sure both are justified.)
- 4) Hold up work & answer

$$c + 6 - 3c = -12$$

$$6 - 2c = -12$$

$$\frac{-2c}{-2} = \frac{-18}{-2}$$

$$\frac{18}{2}$$

$$c = 9$$

$$-18 = -3p - 2 + 3$$

$$-18 = -3p + 1$$

$$-19 = -3p$$

$$\frac{19}{3} = p$$

$$-4(2 + 3a) = -64$$

$$-8 - 12a = -64$$

$$-12a = -56$$

$$a = \frac{56 \div 4}{12 \div 4}$$

$$a = \frac{14}{3}$$

$$\frac{-4(2+3a) = -64}{-4 \quad \quad \quad \div 4}$$

$$2 + 3a = 16$$

$$3a = 14$$

$$a = \frac{14}{3}$$

$$24 - 6x = 2(5 - 6x)$$

$$24 - 6x = 10 - 12x$$

$$6x = -14$$

$$x = \frac{-14}{6}$$

$$x = -\frac{7}{3}$$

$$\frac{24-6x = 2(5-6x)}{\div 2 \quad \quad \quad \div 2}$$

$$12 - 3x = 5 - 6x$$

$$3x = -7$$

$$x = -\frac{7}{3}$$

15 minutes to work on homework

Practice Real World