

February 9, 2016

- * SSC #2 & Quiz #4 - Tomorrow
- * Fraction Practice Problems due Friday

Feb 9-9:55 AM

Algebra

$1x$ $6t$

↑
Variable
Coefficient

Terms: are products of variables and coefficients
 $2x, t, -y$

Expressions: terms are linked together by addition
 $-4x^2 - 5x + 9, x + 2,$

Equations: expressions linked by "="
 $5x - 6 = 15$
 $\frac{1}{2}x + 2(x-3) = 5(x + \frac{1}{2})$

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Linear Equations

↓
A Line

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All linear equations have variable to "one" power
 x^1 or y^1

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One-Step Equations

$x - 3 = 6$

↑
Isolate "x"
+3 +3 A.D.

$x + 0 = 9$

$x = 9$

① $x - 3 = 6$ ② $x = 9$

↔
Equivalent

① $(9) - 3 = 6$
 $6 = 6$ true ✓

② $(9) = 9$ true ✓

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$2x + 4 = 8$

Product -4 a.d.

$\frac{2x}{2} = \frac{4}{2}$ m.d.

$x = 2$

↑
Positive "one"

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$$\frac{3}{4}x + \frac{1}{2} = 7$$

$- \frac{1}{2} \quad - \frac{1}{2}$ $\swarrow \searrow$

$$\frac{3}{4}x = \frac{7}{1} - \frac{1}{2}$$

\downarrow

$$= \frac{14 - 1}{2}$$

$$\frac{4}{3} \cdot \frac{3}{4}x = \frac{13}{2} \cdot \frac{4}{3}$$

$$\frac{12}{12}x = \frac{26}{3}$$

$$x = \frac{26}{3}$$

$x = \frac{26}{3}$

~~$\frac{3}{4}x + \frac{1}{2} = 7$~~

$$\frac{13}{2} + \frac{1}{2} = 7$$

$$\frac{13+1}{2} = 7$$

$$\frac{14}{2} = 7$$

$$7 = 7 \checkmark$$

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