Curriculum Outcome

PR1: . Generalize a pattern arising from a problem-solving context using linear equations and verify by substitution.

PR3. Model and solve problems using linear equations of the form:

***ax* = *b;* = b , a ≠ 0; *ax* + *b* = *c*; +*b* = *c*, a ≠ 0; = *b*, *x* ≠ 0 ax ax xa**

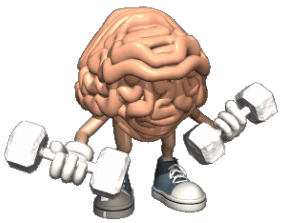
ax*+ *b* = *cx* + *d; a(bx* + *c)* = *d(ex* + *f); a(x* + *b)* = *c; ax* = b+*cx

concretely, pictorially and symbolically, where*a, b, c, d, e, and f* are rational numbers

EXTENSION to unit: Solving equations with fraction in them

Student Friendly: "Rearranging an equation to get all the variables by themselves". Taking care of a fraction.

Warm Up



1) $10 - 2x = 85 + 3x$

$x = -15$

2) $\frac{-1x}{5} + 5 = \frac{9}{2}$

$x = \frac{5}{2}$

3) $\frac{1}{3}(9x + 3) = \frac{3}{2}(20x - 8)$

$x = \frac{13}{27}$

4) $\frac{5x}{6} - 2 = \frac{3}{4} - 3x$

$x = \frac{-15}{46}$

$y = mx + \#$

$$y - y_1 = m(x - x_1)$$

$$y - \frac{1}{2} = \frac{3}{2}\left(x - \frac{1}{5}\right)$$

$$y^{(10)} - \frac{1}{2}^{(10)} = \frac{3x}{2}^{(10)} - \frac{3}{10}^{(10)}$$

$$10y - 5 \overset{+5}{=} 15x - 3 \overset{+5}{}$$

$$\frac{10y}{10} = \frac{15x + 2}{10}$$

$$y = \frac{15x}{10} + \frac{2}{10}$$

$$y = \frac{3}{2}x + \frac{1}{2}$$

1) $10 - 2x = 85 + 3x$

$+2x \quad +2x$

$10 = 85 + 5x$

$-85 \quad -85$

$\frac{-75}{5} = \frac{5x}{5}$

$x = -15$

2) $\frac{-1x}{5} + 5 = \frac{9}{2}$

$(10) \quad (10) \quad (10)$

$-2x + 50 = 45$

$-50 \quad -50$

$\frac{-2x}{-2} = \frac{-5}{-2}$

$x = \frac{5}{2}$

$$\frac{1}{3}(9x + 3) = \frac{3}{2}(20x - 8)$$

$$\frac{9x}{3} + \frac{3}{3} = \frac{60x}{2} - \frac{24}{2}$$

$$3x + 1 = 30x - 12$$

$-3x$ $-3x$

$$1 = 27x - 12$$

$+12$ $+12$

$$\frac{13}{27} = \frac{27x}{27}$$

$$x = \frac{13}{27}$$

$$\frac{1}{3}(9x + 3) = \frac{3}{2}(20x - 8)$$

(6) (6)

$2(9x+3) = 9(20x - 8)$

$18x + 6 = 180x - 72$

$$\frac{1}{3}(x-5)+7=5$$

Some More!!!!!!!

4) $\frac{5x}{6} - 2 = \frac{3}{4} - 3x$ (12) (12) (12) (12)

$10x - 24 = 9 - 36x$ $+36x$ $+36x$

$46x - 24 = 9$ $+24$ $+24$

$\frac{46x}{46} = \frac{33}{46}$

$x = \frac{33}{46}$

Class/Homework

Page 281 - 283

Today

#11(ace)
#16 (aii)
#17(bd)
#18
19(cd)
#21(bc)

Tomorrow

#11(b,d)
#16 (ai)
#17(ac)
19(a,b)
#21(a,b)

When you see fractions you mu
work with fractio

Attachments

Equations01.pdf

Equations03.pdf

Equations02.pdf