Curriculum Outcomes:

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

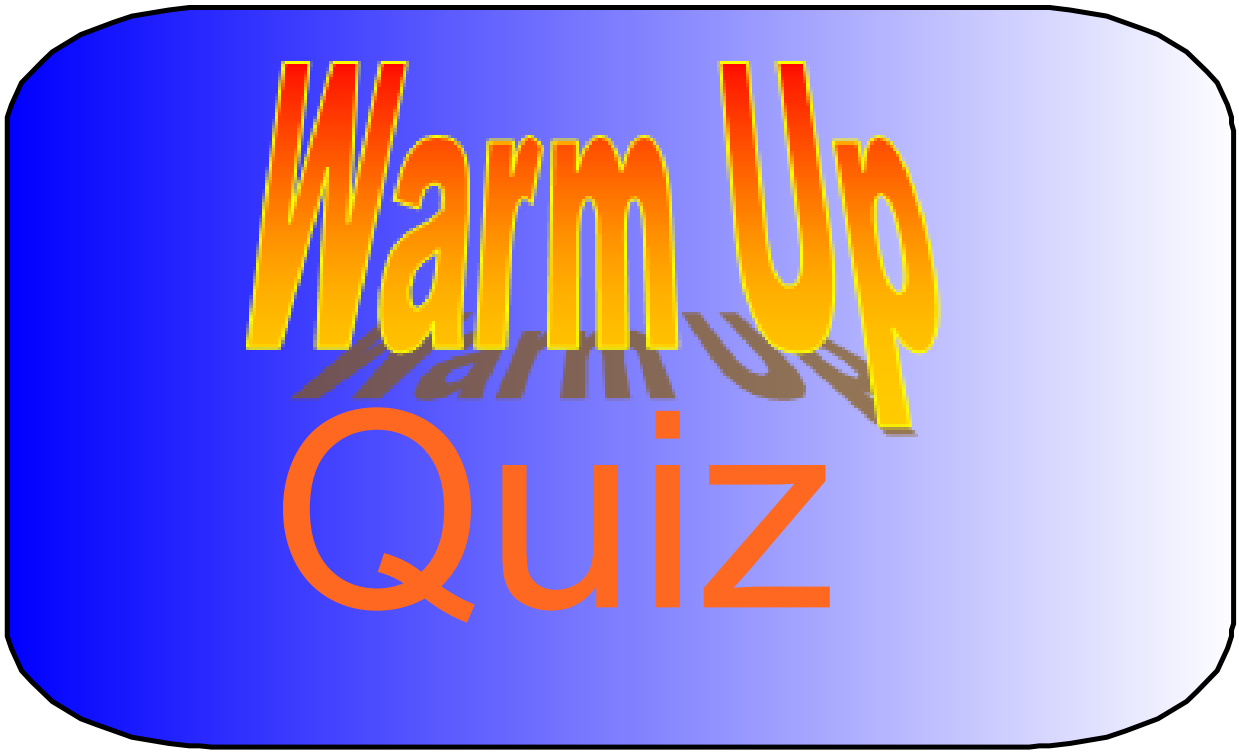
PR3. Model and solve problems using linear equations of the form:

***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

Student Friendly:

"Rearranging an equation with variables on both side of the equal sign"


Warm Up
Quiz

last night's homework

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6
8
#10

Any Questions??????

4, 8, 12, 16
6, 12

multiply by the lowes common multiple

$$\frac{5a}{4}^{\left(\frac{12}{1}\right)} = \frac{a}{6}^{\left(\frac{12}{1}\right)} + 2^{\left(\frac{12}{1}\right)}$$

$$\frac{60a}{4} = \frac{12a}{6} + 24$$

$$15a \overset{-2a}{=} 2a \overset{-2a}{} + 24$$

$$\frac{13a}{13} = \frac{24}{13}$$

$$a = \frac{24}{13} \text{ or } 1\frac{11}{13}$$

$\frac{5}{r} + 2 = 6$ (r) (r)

$5 + 2r = 6r$ $-2r$ $-2r$

$\frac{5}{4} = \frac{4r}{4}$

$r = \frac{5}{4}$

$= 1.25$

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

$\frac{5}{r} + 2^{-2} = 6^{-2}$

$\frac{5}{r} = 4$ (r) (r)

$\frac{5}{4} = \frac{4r}{4}$

$r = \frac{5}{4}$

Two restaurants charge different rates for catering a party

Company A: $30 plate plus an addition flat fee of $300 $30p + 300

Company B: $55 a plate $55p

When do the two companies charge the same amount???

Verify your work

$30p + 300 = 55p$ (−30p)

(−30p)

$\frac{300}{25} = \frac{25p}{25}$

$p = 12$

LHS	RHS
$30(12) + 300$	$55(12)$
$360 + 300$	$660
660	

★ Simplify first ★

Solve

$9z-1-7z = 7-6z-15$

$2z-1 = -8-6z$ (+6z)

$8z-1 = -8$ (+1)

$\frac{8z}{8} = \frac{-7}{8}$

$z = -\frac{7}{8}$

Solve

$4(y+8) = 7(y+2)$

y= 6

$4y + 32 = 7y + 14$

$-4y \quad -4y$

$32 = 3y + 14$

$-14 \quad -14$

$\frac{18}{3} = \frac{3y}{3}$

$y = 6$

$$\frac{2}{3}(6x + 9) = \frac{1}{2}(10x - 2)$$

x= 7

$$\frac{12x}{3} + \frac{18}{3} = \frac{10x}{2} - \frac{2}{2}$$

$$4x + 6 = 5x - 1$$

$-4x$ $-4x$

$$6 = x - 1$$

$+1$ $+1$

$$x = 7$$

$$\frac{2}{3}(5x + 2) = \frac{1}{2}(7x - 3)$$

x= 17

Class/Homework

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

When you see fractions you must work with fractions