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"

Solve for the "unknown" variable
(Use inverse operation and SHOW ALL WORK)

1) $-2r - 7 = 25$

$+7 \quad +7$

$-2r = 32$

$\frac{-2r}{-2} = \frac{32}{-2}$

$r = -16$

2) $-3(h+3) = 15$

$-3h - 9 = 15$

$+9 \quad +9$

$\frac{-3h}{-3} = \frac{24}{-3}$

$h = -8$

3) $-8p + 11 = 7 - 10p$

$+10p \quad +10p$

$-8p + 10p + 11 = 7 - 11$

$-11 \quad -11$

$-8p + 10p = 7 - 11$

$\frac{2p}{2} = \frac{-4}{2}$

$p = -2$

4) $\frac{-5r}{4} = -15$

$(4) \quad (4)$

$\frac{-5r}{-5} = \frac{-60}{-5}$

$r = 12$

Solve for the "unknown" variable
(Use inverse operation and SHOW ALL WORK)

1) $-2r-7=25$

$+7 \quad +7$

$\frac{-2r}{-2} = \frac{32}{-2}$

$r=-16$

2) $-3(h+3)=15$

$-3h-9=15$ $+9 \quad +9$

$\frac{-3h}{-3} = \frac{24}{-3}$

$h=-8$

3) $-8p+11=7-10p$

$+10p \quad +10p$

$-8p+10p+11=7-11$

$\frac{2p}{2} = \frac{-4}{2}$

$p=-2$

4) $\frac{-5r}{4}=-15$ (4)

$\frac{-5r}{-5} = \frac{-60}{-5}$

$r=12$

Solve for the "unknown" variable
(Use inverse operation and SHOW ALL WORK)

1) $\frac{-6}{r} = 24$

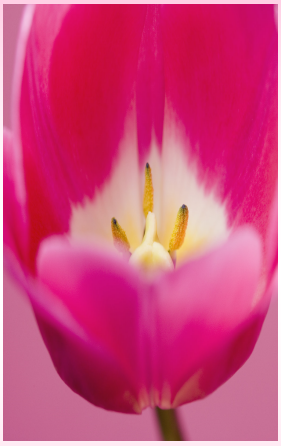
2) $-3(h+3) = 2(h-1)$

3) $\frac{2}{3}(6x - 18) = 2x - 6$

4) $\frac{3x}{4} - \frac{1}{6} = \frac{5x}{6} - \frac{1}{4}$

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

$$\frac{5}{2} - \frac{2}{3}x = \frac{1}{6}x$$



$$\frac{2}{3}(x-7) = \frac{11}{2}(x+4)$$

$$\frac{2x}{3}^{(6)} - \frac{14}{3}^{(6)} = \frac{11x}{2}^{(6)} + \frac{44}{2}^{(6)}$$

$$4x - 28 = 33x + 132$$

$$-28 = 29x + 132$$

$$\frac{-160}{29} = \frac{29x}{29}$$

$$x = -\frac{160}{29}$$

Class/Homework

6, 8, 10

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

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