

solve

Ex. 1  $5(-3x + 2) = 16 - 3(x - 6)$

$$-15x + 10 = 16 - 21x + 18$$

$$+21x \quad -10 \quad -10 \quad +21x$$

$$-15x + 10 = 34 - 21x$$

$$-15x + 21x = 34 - 10$$

$$6x = 24$$

$$\frac{6x}{6} = \frac{24}{6}$$

$$x = 4$$

LS

$$= 5(-3x + 2)$$

$$= 5[-3(4) + 2]$$

$$= 5(-12 + 2)$$

$$= 5(-10)$$

$$= -50$$

RS

$$= 16 - 3(7x - 6)$$

$$= 16 - 3(7(4) - 6)$$

$$= 16 - 3(28 - 6)$$

$$= 16 - 3(22)$$

$$= 16 - 66$$

$$= -50$$

$$LS = RS$$

$\therefore x = 4$  is true.

Ex 2.  $\frac{2x}{5} = 6$

$$1 \cdot 5 \left( \frac{2x}{5} \right) = 5(6)$$

$$1(2x) = 30$$

$$2x = 30$$

$$x = \frac{30}{2}$$

$$x = 15$$

$$LS = \frac{2x}{5} \quad RS = 6$$

$$= \frac{2(15)}{5}$$

$$= \frac{30}{5} = 6 = RS$$

$$\underline{\text{Ex. 3}} \quad \frac{5+7x}{3} = \frac{2x+4}{5} - 1$$

$$CD = 15$$

$$\cancel{5} \left( \frac{5+7x}{\cancel{3}} \right) = \cancel{3} \left( \frac{2x+4}{\cancel{5}} \right) - 15(1)$$

$$5(5+7x) = 3(2x+4) - 15$$

$$25 + 35x = 6x + \underline{12 - 15}$$

$$25 + 35x = 6x - 3$$

$$35x - 6x = -3 - 25$$

$$29x = -28$$

$$x = \frac{-28}{29}$$

$$3y - 24 = 6y$$

$$-24 = 6y - 3y$$

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

$$-8 = y$$

$$y = -8$$

review work  
pg.337 #1, 8, 9.

pg331 #4ab

$$4a) 177.50 = 6.5a + 8d$$

a= # tickets purchased in advance

d=#tickets purchased at the door

$$d=10$$

$$177.5=6.5a + 8(10)$$

$$177.5=6.5\underline{a} + 80$$

Solve for a

$$4b) 249 = 6.5a + 8d$$

a= # tickets purchased in advance

d=#tickets purchased at the door

$$a=10$$

$$177.5=6.5(10) + 8d$$

$$177.5=65 + 8\underline{d}$$

Solve for d

pg295 #10

10a)

q = # of rolls of quarters

n = # of rolls of nickels

$$250 = (0.25)(40)q + (0.05)(40)n$$

$$250 = 10q + 2n$$

$$q = 17$$

$$250 = 10(17) + 2n$$

$$250 = 170 + 2n$$

b)

$$250 = 170 + 2n$$
$$250 - 170 = 2n$$
$$80 = 2n$$
$$n = 40$$