



Warm-Up

A. $8 - \frac{3}{4}c = 5$

$$8 - \frac{3c}{4} = 5$$

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$$\boxed{8-8} - \frac{3c}{4} = 5-8$$

$$\cancel{8-8} - \frac{3c}{4} = -3(4)$$

$$-\frac{3c}{4} = \frac{-12}{-3}$$

$$c = 4$$

LS	RS
$8 - \frac{3c}{4}$	5
$8 - \frac{3(4)}{4}$	
$8 - \frac{12}{4}$	
$8 - 3$	

B. $6(-2 - x) = -5(2x + 4)$

$$-12 - 6x = -10x - 20$$

$$-12 - 6x + 10x = \boxed{-10x + 10x} - 20$$

$$-12 + 4x = -20$$

$$\boxed{-12+12} + 4x = -20+12$$

$$\frac{4x}{4} = \frac{-8}{4}$$
$$x = -2$$

Equations that have Fractions!!!

Mar. 1/11

$$\overset{(6)}{\frac{x}{6}} - \overset{(6)}{5} = \overset{(6)}{\frac{1x}{2}}$$

$$\frac{6x}{6} - 30 = \frac{6x}{2}$$

$$x - 30 = 3x$$

$$1x - 3x - 30 = \boxed{3x - 3x}$$

$$-2x - 30 = 0$$

$$-2x \boxed{-30 + 30} = 0 + 30$$

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

$$x = -15$$

**Clear the fractions
by multiplying both
sides by lowest
common multiple**



$$\frac{1}{2}x + \frac{1}{3}x = 10$$

$$\frac{6x}{2} + \frac{6x}{3} = 60$$

$$3x + 2x = 60$$

$$\frac{5x}{5} = \frac{60}{5} \quad x = 12$$

$$\frac{x}{3} + 2 = -7$$

$$\frac{x}{3} + 2 - 2 = -7 - 2$$

$$\frac{x}{3} = -9$$

$$x = -27$$

$$\frac{x}{3} + 2 = -7$$

$$\frac{3x}{3} + 6 = -21$$

$$x + 6 = -21$$

$$x + 6 - 6 = -21 - 6$$
$$x = -27$$

$$\frac{2}{3}x + 9 = \frac{3}{4}x - 6$$

$$\frac{24x}{3} + 108 = \frac{36x}{4} - 72$$

$$8x + 108 = 9x - 72$$

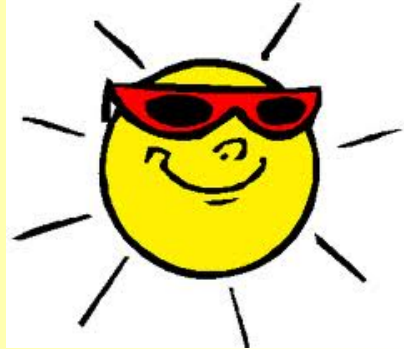
$$8x - 9x + 108 = \boxed{9x - 9x} - 72$$

$$-x + 108 = -72$$

$$-x + \boxed{108 - 108} = -72 - 108$$

$$\frac{-x}{-1} = \frac{-180}{-1} \quad x = 180$$

$$x = 180$$



WARM-UP



A)

$$-2(1 - x) = -3(2 - x)$$

$$-2 + 2x = -6 + 3x$$

$$-2 + 2x - 3x = -6 + 3x - 3x$$

$$-2 - x = -6$$

$$\boxed{-2 + 2} - x = -6 + 2$$

$$\begin{array}{r} -x = -4 \\ \frac{-x}{-1} = \frac{-4}{-1} \\ x = 4 \end{array}$$

LCM = 15

$$B) \frac{2a}{3} = \frac{4a}{5} + 7$$

$$\frac{30a}{3} = \frac{60a}{5} + 105$$

$$10a = 12a + 105$$

$$10a - 12a = \boxed{12a - 12a} + 105$$

$$\frac{-2a}{-2} = \frac{105}{-2}$$

$$\boxed{a = \frac{-105}{2}}$$

$$\boxed{a = -52\frac{1}{2}}$$

HOMework QUESTIONS???

21. Solve each equation. Verify the solution.

a) $\frac{x}{4} + \frac{7}{4} = \frac{5}{6}$ $x = -\frac{11}{3}$

b) $\frac{5x}{16} - \frac{5}{4} = \frac{x}{4}$ $x = 20$

c) $2 - \frac{x}{24} = \frac{5x}{24} + 1$ $x = 4$

d) $\frac{25}{9} + \frac{x}{9} = \frac{7x}{6} - \frac{5}{2}$ $x = 5$

$-3\frac{2}{3}$

a) $\frac{x}{4} + \frac{7}{4} = \frac{5}{6}$

$\frac{12x}{4} + \frac{84}{4} = \frac{60}{6}$

$3x + 21 = 10$

$3x + 21 - 21 = 10 - 21$

$\frac{3x}{3} = \frac{-11}{3}$

$x = -\frac{11}{3}$

c) $2 - \frac{x}{24} = \frac{5x}{24} + 1$

$48 - \frac{24x}{24} = \frac{120 + 24}{24}$

$48 - x = 5x + 24$

$48 - x - 5x = \boxed{5x - 5x} + 24$

$48 - 6x = 24$

5. Solve each equation. Verify the solution.

- a) $\frac{k}{3} = -1.5$
- b) $10.5 = 3b - 12.5$
- c) $5(x - 7.2) = 14.5$
- d) $8.4 = 1.2b$
- e) $2 + \frac{n}{3} = 2.8$
- f) $-8 = 0.4(3.2 + h)$

$k = -4.5$
 $b = \frac{23}{3}$
 $x = 10.1$
 $b = 7$
 $n = 2.4$
 $h = -23.2$

b) $10.5 = 3b - 12.5$

$10.5 + 12.5 = 3b - \boxed{12.5 + 12.5}$

$\frac{23}{3} = \frac{3b}{3}$

$\frac{23}{3} = b$

$7\frac{2}{3}$

7.

d) $\frac{3x}{2} = 11 + \frac{4x}{3}$

e) $0.2(5 - 2r) = 0.3(1 - r)$

f) $12.9 + 2.3y = 4.5y + 19.5$

$x = 6$

$r = 7$

$y = -3$

7) $0.2(5 - 2r) = 0.3(1 - r)$

$1 - 0.4r = 0.3 - 0.3r$

$1 - 0.4r + 0.3r =$

7. d) $\frac{3x}{2} = 11 + \frac{4x}{3}$

$\frac{30x}{2} = 66 + \frac{12x}{3}$

$15x = 66 + 4x$

$15x - 4x = 66 + 4x - 4x$

$\frac{11x}{11} = \frac{66}{11}$
 $x = 6$

$$\textcircled{A} \frac{122}{\cancel{r}} = 3 (r)$$

$$\frac{122}{3} = \frac{3r}{3}$$

$$40.\dot{6} = r$$

$$\overset{(12)}{\frac{2x}{3}} + \overset{(12)}{\frac{11}{4}} = 3 - \overset{(12)}{\frac{11x}{6}}$$

$$\frac{24x}{3} + \frac{132}{4} = 36 - \frac{132}{6}$$

$$8x + 33 = 36 - 22x$$

$$8x + 22x + 33 = 36 - \boxed{22x + 22x}$$

$$30x + 33 = 36$$

$$30x \boxed{33 - 33} = 36 - 33$$

$$\frac{30x}{30} = \frac{3}{30}$$

$$x = \frac{3}{30}$$

$$x = \frac{1}{10}$$

$$^{(2)} \frac{7}{2} (m+12) = \frac{5}{2} (20+m)$$

$$\frac{14}{2} (m+12) = \frac{10}{2} (20+m)$$

$$7(m+12) = 5(20+m)$$

$$7m + 84 = 100 + 5m$$

$$7m - 5m + 84 = 100 + \boxed{5m - 5m}$$

$$2m + 84 = 100$$

$$2m + 84 - 84 = 100 - 84$$

$$\frac{2m}{2} = \frac{16}{2}$$

$$m = 8$$

$$m = 8$$

$$(6) \frac{1}{3} (5-3t) = \frac{5}{6} (t-2)$$

$$\frac{6}{3} (5-3t) = \frac{30}{6} (t-2)$$

$$2(5-3t) = 5(t-2)$$

$$10-6t = 5t-10$$

$$10-6t-5t = \boxed{5t-5t}-10$$

$$10-11t = -10$$

$$\boxed{10-10}-11t = -10-10$$

$$\frac{-11t}{-11} = \frac{-20}{-11}$$

$$t = \frac{20}{11} = 1\frac{9}{11}$$

HW
Pg 282
19
cjd

Worksheet

#1 a, c, e
#2 c, d
#3 a