

Name: KEY
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6.V Worksheet

1) For each expression, identify any variable(s), coefficient(s), constant. Also, state the number of terms, and identify each term.

	a) $3m - 7$	b) $x^2 - y - 2$	c) $5 - 2a^2 + b^3$	d) $-3mn^2p^5$
Variable(s):	m	x, y	a, b	m, n, p
Coefficient(s):	3	$1, -1$	$-2, 1$	-3
Constant:	-7	-2	5	N/A
# of Terms:	2	3	3	1
List of terms:	$3m, -7$	$x^2, -y, -2$	$5, -2a^2, b^3$	$-3mn^2p^5$

2a) In a basketball game, the Warriors scored $19x + 25y + 18z$ points and the Thunder scored $22x + 24y + 21z$ points. In these expressions, x is the value of a 3-pointer, y is a two-pointer, and z is a one-point free throw. How many points did each team score? Who won?

Warriors: $19z + 25y + 18z$	Thunder: $22x + 24y + 21z$	Thunder
$(19)(3) + 25(2) + 18(1)$	$22(3) + 24(2) + 21(1)$	won
$57 + 50 + 18$	$66 + 48 + 21$	$135 - 125$
125	135	

2b) Over the course of his career, Steve Nash scored this many points: $1685x + 4636y + 3060z$. How many total points did he score in his career?

$$1685(3) + 4636(2) + 3060(1)$$

$$5055 + 9272 + 3060$$

$$= 17387 \text{ career points!}$$

3) Evaluate for $x = 2$ and $y = -1$

a) $x^2 - 3y + 7$

$$(2)^2 - 3(-1) + 7$$

$$4 - 3(-1) + 7$$

$$4 + 3 + 7$$

$$14$$

b) $5y^2 - 2x^2 + 6y - x$

$$5(-1)^2 - 2(2)^2 + 6(-1) - (2)$$

$$5(1) - 2(4) + 6(-1) - 2$$

$$5 - 8 - 6 - 2$$

$$-3 - 6 - 2$$

$$-9 - 2$$

$$-11$$

c) $2(3xy - x^3y) + 4$

$$2(3(2)(-1) - (2)^3(-1)) + 4$$

$$2(3(2)(-1) - 8(-1)) + 4$$

$$2(-6 - (-8)) + 4$$

$$2(2) + 4$$

$$4 + 4$$

$$8$$

d) $7xy^2 - 4x \div 3$

$$7(2)(-1)^2 - 4(2) \div 3$$

$$7(2)(1) - 4(2) \div 3$$

$$14 - 8 \div 3$$

$$14 - 2.\bar{6}$$

$$11.\bar{3}$$

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6.1A Worksheet

Solve each equation. Show all work.

1) $x + 4 = 9$
 $-4 \quad -4$
 $x = 5$

2) $y - 6 = 2$
 $+6 \quad +6$
 $y = 8$

3) $p + 7 = -1$
 $-7 \quad -7$
 $p = -8$

4) $m - 4 = -4$
 $+4 \quad +4$
 $m = 0$

5) $+5 - x = 14$
 $-x + 5 = 14$
 $-5 \quad -5$
 $-x = 9$
 $-1 \quad -1$
 $x = -9$

6) $+8 + a = -9$
 $a + 8 = -9$
 $-8 \quad -8$
 $a = -17$

7) $y - 2.3 = -1.1$
 $+2.3 \quad +2.3$
 $y = 1.2$

8) $4.8 = 3 - m$
 $4.8 = -m + 3$
 $-3 \quad -3$
 $1.8 = -m$
 $-1 \quad -1$
 $-1.8 = m$

9) $12 = p + 9$
 $-9 \quad -9$
 $3 = p$

10) $-6 = 3 + w$
 $-6 = w + 3$
 $-3 \quad -3$
 $-9 = w$

11) $y - 43 = -27$
 $+43 \quad +43$
 $y = 16$

12) $19 = 32.7 + c$
 $19 = c + 32.7$
 $-32.7 \quad -32.7$
 $-13.7 = c$

Solve each equation. Show all work.

$$13) \frac{2y}{2} = \frac{6}{2}$$
$$y = 3$$

$$14) \frac{3m}{3} = \frac{24}{3}$$
$$m = 8$$

$$15) \frac{-7w}{-7} = \frac{14}{-7}$$
$$w = -2$$

$$16) \frac{-4x}{-4} = \frac{-40}{-4}$$
$$x = 10$$

$$17) -w = 92$$
$$\frac{-w}{-1} = \frac{92}{-1}$$
$$w = -92$$

$$18) 27 = -9y$$
$$\frac{27}{-9} = \frac{-9y}{-9}$$
$$-3 = y$$

$$19) -54 = -6n$$
$$\frac{-54}{-6} = \frac{-6n}{-6}$$
$$9 = n$$

$$20) 4x = -10$$
$$\frac{4x}{4} = \frac{-10}{4}$$
$$x = \frac{-10 \div 2}{4 \div 2}$$
$$x = \frac{-5}{2}$$

$$21) \frac{m}{2} = 5$$
$$\frac{2m}{2} = 5(2)$$
$$m = 10$$

$$22) \frac{w}{6} = -2$$
$$\frac{6w}{6} = -2(6)$$
$$w = -12$$

$$23) \frac{x}{-7} = -3$$
$$\frac{-x}{-7} = -3(-7)$$
$$x = 21$$

$$24) 4 = \frac{c}{-8}$$
$$(-8)4 = \frac{c}{-8}(-8)$$
$$-32 = c$$

$$25) \frac{-y}{8} = 6(5)$$
$$\frac{-y}{8} = \frac{30}{-1}$$
$$y = -30$$

$$26) \frac{-n}{-7} = 7$$
$$\frac{-n}{-7} = \frac{7(7)}{-7}$$
$$n = 49$$

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6.1B Worksheet

Solve each equation. Show all work.

1) $3x + 5 = 11$ Check for #1

LS	RS
$3x + 5$	11
$3(2) + 5$	
$6 + 5$	
11	

$x = 2$

2) $2y - 4 = 10$

LS	RS
$2y - 4$	10
$2y = 14$	
$y = 7$	

$y = 7$

3) $-p + 7 = -1$

LS	RS
$-p + 7$	-1
$-p = -8$	
$p = 8$	

$p = 8$

4) $-5m - 8 = -13$

LS	RS
$-5m - 8$	-13
$-5m = -5$	
$m = 1$	

$m = 1$

5) $+3 - 3w = 15$ Check for #5

LS	RS
$3 - 3w$	15
$3 - 3(-4)$	
$3 + 12$	
15	

$w = -4$

6) $18 = -4 - 11x$

LS	RS
18	$-4 - 11x$
$22 = -11x$	
$-2 = x$	

$-2 = x$

7) $\frac{x}{2} + 7 = 5$ Check for #7

LS	RS
$\frac{x}{2} + 7$	5
$\frac{x}{2} = -2$	
$x = -4$	

$x = -4$

8) $\frac{y}{-3} - 4 = 1$

LS	RS
$\frac{y}{-3} - 4$	1
$\frac{y}{-3} = 5$	
$y = -15$	

$y = -15$

9) $3 + \frac{m}{3} = 5$

LS	RS
$3 + \frac{m}{3}$	5
$\frac{m}{3} = 2$	
$m = 6$	

$m = 6$

Solve each equation. Show all work.

$$10) 3 + 4m - 6m = 11$$

$$-2m + \cancel{3} = 11$$

$$\frac{-2m}{-2} = \frac{8}{-2}$$

$$m = -4$$

$$11) 3x - 8 + 3x = -25 - 1$$

$$6x - 8 = -26$$

$$\frac{6x}{6} = \frac{-18}{6}$$

$$x = -3$$

$$12) 1.4w - 3.7 = 3.3$$

$$+3.7 \quad | \quad +3.7$$

$$\frac{1.4w}{1.4} = \frac{7}{1.4}$$

$$w = 5$$

$$13) \frac{p}{2} - \frac{1}{4} = -\frac{3}{4}$$

$$+\frac{1}{4} \quad | \quad +\frac{1}{4}$$

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

$$\frac{2p}{2} = -\frac{1}{2} \left(\frac{2}{1} \right)$$

$$p = -\frac{2}{2} \quad p = -1$$

$$14) 3 + \frac{m}{2} - 6 = 2 - (-3)$$

$$\frac{m}{2} - \cancel{3} = 5$$

$$+\frac{m}{2} = 8(2)$$

$$m = 16$$

$$15) 13 = 2x - 5x - 5$$

$$13 = -3x - 5$$

$$+5 \quad | \quad +5$$

$$\frac{18}{-3} = \frac{-3x}{-3}$$

$$-6 = x$$

16) Do a check for #10

LS	RS
$3 + 4m - 6m$	11
$3 + 4(-4) - 6(-4)$	
$3 - 16 + 24$	
$-13 + 24$	
11	

$$17) \frac{3m}{2} + 10 = -8$$

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

$$\frac{3m}{3} = \frac{-36}{3}$$

$$m = -12$$

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6.1C Worksheet

Solve each equation. Show all work.

1) $3x + 7 = x + 3$ Check for #1

$\begin{array}{r} -x \\ 2x + 7 \\ -7 \\ \hline 2x = -4 \\ \frac{2x}{2} = \frac{-4}{2} \\ x = -2 \end{array}$	<table style="border-collapse: collapse;"> <tr> <th style="border-right: 1px solid black; padding: 5px;">LS</th> <th style="padding: 5px;">RS</th> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$3x + 7$</td> <td style="padding: 5px;">$x + 3$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$3(-2) + 7$</td> <td style="padding: 5px;">$-2 + 3$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$-6 + 7$</td> <td style="padding: 5px;">1</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">1</td> <td style="padding: 5px;">\checkmark</td> </tr> </table>	LS	RS	$3x + 7$	$x + 3$	$3(-2) + 7$	$-2 + 3$	$-6 + 7$	1	1	\checkmark
LS	RS										
$3x + 7$	$x + 3$										
$3(-2) + 7$	$-2 + 3$										
$-6 + 7$	1										
1	\checkmark										

2) $-2m - 5 = 3m + 20$

$\begin{array}{r} -3m \\ -5m - 5 \\ +5 \\ \hline -5m = 25 \\ \frac{-5m}{-5} = \frac{25}{-5} \\ m = -5 \end{array}$	<table style="border-collapse: collapse;"> <tr> <th style="border-right: 1px solid black; padding: 5px;">LS</th> <th style="padding: 5px;">RS</th> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$-2m - 5$</td> <td style="padding: 5px;">$3m + 20$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$-2(-5) - 5$</td> <td style="padding: 5px;">$3(-5) + 20$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$10 - 5$</td> <td style="padding: 5px;">$-15 + 20$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">5</td> <td style="padding: 5px;">5</td> </tr> </table>	LS	RS	$-2m - 5$	$3m + 20$	$-2(-5) - 5$	$3(-5) + 20$	$10 - 5$	$-15 + 20$	5	5
LS	RS										
$-2m - 5$	$3m + 20$										
$-2(-5) - 5$	$3(-5) + 20$										
$10 - 5$	$-15 + 20$										
5	5										

3) $7y + 6 = 4y - 6$

$\begin{array}{r} -4y \\ 3y + 6 \\ +6 \\ \hline 3y = -12 \\ \frac{3y}{3} = \frac{-12}{3} \\ y = -4 \end{array}$	<table style="border-collapse: collapse;"> <tr> <th style="border-right: 1px solid black; padding: 5px;">LS</th> <th style="padding: 5px;">RS</th> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$7y + 6$</td> <td style="padding: 5px;">$4y - 6$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$7(-4) + 6$</td> <td style="padding: 5px;">$4(-4) - 6$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$-28 + 6$</td> <td style="padding: 5px;">$-16 - 6$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">-22</td> <td style="padding: 5px;">-22</td> </tr> </table>	LS	RS	$7y + 6$	$4y - 6$	$7(-4) + 6$	$4(-4) - 6$	$-28 + 6$	$-16 - 6$	-22	-22
LS	RS										
$7y + 6$	$4y - 6$										
$7(-4) + 6$	$4(-4) - 6$										
$-28 + 6$	$-16 - 6$										
-22	-22										

4) $-p + 27 = -2p + 6 + 4p$ Check for #4

$\begin{array}{r} -3p + 27 \\ -4p \\ -7p + 27 \\ -27 \\ \hline -7p = -21 \\ \frac{-7p}{-7} = \frac{-21}{-7} \\ p = 3 \end{array}$	<table style="border-collapse: collapse;"> <tr> <th style="border-right: 1px solid black; padding: 5px;">LS</th> <th style="padding: 5px;">RS</th> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$-p + 27 - 2p$</td> <td style="padding: 5px;">$6 + 4p$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$-3 + 27 - 2(3)$</td> <td style="padding: 5px;">$6 + 4(3)$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$-3 + 27 - 6$</td> <td style="padding: 5px;">$6 + 12$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$24 - 6$</td> <td style="padding: 5px;">18</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">18</td> <td style="padding: 5px;">18</td> </tr> </table>	LS	RS	$-p + 27 - 2p$	$6 + 4p$	$-3 + 27 - 2(3)$	$6 + 4(3)$	$-3 + 27 - 6$	$6 + 12$	$24 - 6$	18	18	18
LS	RS												
$-p + 27 - 2p$	$6 + 4p$												
$-3 + 27 - 2(3)$	$6 + 4(3)$												
$-3 + 27 - 6$	$6 + 12$												
$24 - 6$	18												
18	18												

5) $8w - 9w = 3w - 16$

$\begin{array}{r} -1w \\ -3w \\ \hline -4w = -16 \\ \frac{-4w}{-4} = \frac{-16}{-4} \\ w = 4 \end{array}$	<table style="border-collapse: collapse;"> <tr> <th style="border-right: 1px solid black; padding: 5px;">LS</th> <th style="padding: 5px;">RS</th> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$8w - 9w$</td> <td style="padding: 5px;">$3w - 16$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$8(4) - 9(4)$</td> <td style="padding: 5px;">$3(4) - 16$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$32 - 36$</td> <td style="padding: 5px;">$12 - 16$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">-4</td> <td style="padding: 5px;">-4</td> </tr> </table>	LS	RS	$8w - 9w$	$3w - 16$	$8(4) - 9(4)$	$3(4) - 16$	$32 - 36$	$12 - 16$	-4	-4
LS	RS										
$8w - 9w$	$3w - 16$										
$8(4) - 9(4)$	$3(4) - 16$										
$32 - 36$	$12 - 16$										
-4	-4										

6) $3m - 10.1 = 9.9 - 2m$

$\begin{array}{r} +2m \\ 5m - 10.1 \\ +10.1 \\ \hline 5m = 20 \\ \frac{5m}{5} = \frac{20}{5} \\ m = 4 \end{array}$	<table style="border-collapse: collapse;"> <tr> <th style="border-right: 1px solid black; padding: 5px;">LS</th> <th style="padding: 5px;">RS</th> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$3m - 10.1$</td> <td style="padding: 5px;">$9.9 - 2m$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$3(4) - 10.1$</td> <td style="padding: 5px;">$9.9 - 2(4)$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$12 - 10.1$</td> <td style="padding: 5px;">$9.9 - 8$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">1.9</td> <td style="padding: 5px;">1.9</td> </tr> </table>	LS	RS	$3m - 10.1$	$9.9 - 2m$	$3(4) - 10.1$	$9.9 - 2(4)$	$12 - 10.1$	$9.9 - 8$	1.9	1.9
LS	RS										
$3m - 10.1$	$9.9 - 2m$										
$3(4) - 10.1$	$9.9 - 2(4)$										
$12 - 10.1$	$9.9 - 8$										
1.9	1.9										

7) $-5 + 1 + x = 3x - 8$

$\begin{array}{r} x - 4 \\ -3x \\ \hline -2x - 4 \\ +4 \\ \hline -2x = -4 \\ \frac{-2x}{-2} = \frac{-4}{-2} \\ x = 2 \end{array}$	<table style="border-collapse: collapse;"> <tr> <th style="border-right: 1px solid black; padding: 5px;">LS</th> <th style="padding: 5px;">RS</th> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$-5 + 1 + x$</td> <td style="padding: 5px;">$3x - 8$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$-5 + 1 + 2$</td> <td style="padding: 5px;">$3(2) - 8$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">-2</td> <td style="padding: 5px;">$6 - 8$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">-2</td> <td style="padding: 5px;">-2</td> </tr> </table>	LS	RS	$-5 + 1 + x$	$3x - 8$	$-5 + 1 + 2$	$3(2) - 8$	-2	$6 - 8$	-2	-2
LS	RS										
$-5 + 1 + x$	$3x - 8$										
$-5 + 1 + 2$	$3(2) - 8$										
-2	$6 - 8$										
-2	-2										

Solve each equation. Show all work.

10) $11y + 25 = 52 + 27 + 2y$

$$\begin{array}{r|l} 11y + 25 & = 79 + 2y \\ -2y & -2y \\ \hline 9y + 25 & = 79 \\ -25 & -25 \\ \hline 9y & = 54 \\ \frac{9y}{9} & = \frac{54}{9} \\ \hline y & = 6 \end{array}$$

Do a check for #10:

LS	RS
$11y + 25$	$52 + 27 + 2y$
$11(6) + 25$	$79 + 2(6)$
$66 + 25$	$79 + 12$
91	91

↓

11) $2p + 10 = 7 - 3p + 13$

$$\begin{array}{r|l} 2p + 10 & = -3p + 20 \\ +3p & +3p \\ \hline 5p + 10 & = 20 \\ -10 & -10 \\ \hline 5p & = 10 \\ \frac{5p}{5} & = \frac{10}{5} \\ \hline p & = 2 \end{array}$$

12) $65 + x = 73 + 3x - 4$

$$\begin{array}{r|l} x + 65 & = 3x + 69 \\ -3x & -3x \\ \hline -2x + 65 & = 69 \\ -65 & -65 \\ \hline -2x & = 4 \\ \frac{-2x}{-2} & = \frac{4}{-2} \\ \hline x & = -2 \end{array}$$

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6.2A Worksheet

Simplify

$$1) \overbrace{3(x+4)} \\ 3x+12$$

$$2) \overbrace{-2(y+9)} \\ -2y-18$$

$$3) \overbrace{4(m-2)} \\ 4m-8$$

$$4) \overbrace{-3(p-5)} \\ -3p+15$$

$$5) \overbrace{7(-y+3)} \\ -7y+21$$

$$6) \overbrace{-(-x-4)} \\ = |x+4 \\ = x+4$$

$$7) \overbrace{2(x^2-6x+8)} \\ 2x^2-12x+16$$

$$8) \overbrace{-4(m^2+2m-4)} \\ -4m^2-8m+16$$

$$9) \overbrace{5(x+7)} + \overbrace{2(x+1)} \\ \underline{5x+35} + \underline{2x+2} \\ 7x+37$$

$$10) \overbrace{-3(m-2)} - \overbrace{1(m+1)} \\ \underline{-3m+6} - \underline{1m-1} \\ -4m+5$$

$$11) \overbrace{-6(w+3)} - \overbrace{2(-w-2)} \\ \underline{-6w-18} + \underline{2w+4} \\ -4w-14$$

Solve. Show all work.

$$12) \overbrace{2(x+1)} = -10 \\ 2x+2 = -10 \\ \underline{\quad} \quad \underline{-2} \\ 2x = -12 \\ \underline{\quad} \quad \underline{2} \\ x = -6$$

$$13) \overbrace{2(y+3)} - 5 = 6 - 3y \\ 2y+6-5 = 6-3y \\ 2y+1 = 6-3y \\ \underline{+3y} \quad \underline{-3y} \\ 5y+1 = 6 \\ \underline{-1} \quad \underline{-1} \\ 4y = 5 \\ \underline{\quad} \quad \underline{4} \\ y = \frac{5}{4}$$

Solve. Show all work.

$$14) 5(2m-3) = 2(-3m-2) + 5$$

$$10m - 15 = -6m - 4 + 5$$

$$10m - 15 = -6m + 1$$

+6m

$$16m - 15 = 1$$

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

$$m = 1$$

$$15) 4(p-7) - 2(p+3) = -15p$$

$$4p - 28 - 2p - 6 = -15p$$

$$2p - 34 = -15p$$

$$\frac{-34}{-17} = \frac{-17p}{-17}$$

$$2 = p$$

$$16) 7(2y-1) - 2(5y-6) = 2(4y-5) + 7$$

$$14y - 7 - 10y + 12 = 8y - 10 + 7$$

$$4y + 5 = 8y - 3$$

-8y

$$-4y + 5 = -3$$

$$-4y = -8$$

$$y = 2$$

$$17) 2(n-8) - (n-4) = 3(n+5) + 3$$

$$2n - 16 - n + 4 = 3n + 15 + 3$$

$$n - 12 = 3n + 18$$

-3n

$$-2n - 12 = 18$$

$$-2n = 30$$

$$n = -15$$

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6.2B Worksheet

Solve each equation. Show all work.

$$1) \frac{m}{8} = \frac{1}{4}$$

$$4m = 8(1)$$

$$\frac{4m}{4} = \frac{8}{4}$$

$$m = 2$$

$$2) \frac{-5}{6} = \frac{15}{x}$$

$$-5x = 6(15)$$

$$\frac{-5x}{-5} = \frac{90}{-5}$$

$$x = -18$$

$$3) -\frac{9}{y} = \frac{27}{-12}$$

$$27y = (-9)(-12)$$

$$\frac{27y}{27} = \frac{108}{27}$$

$$y = 4$$

$$4) \frac{(w+1)}{3} = \frac{(w-1)}{5}$$

$$5(w+1) = 3(w-1)$$

$$5w + 5 = 3w - 3$$

$$2w + 8 = -3$$

$$\frac{2w}{2} = \frac{-8}{2} \quad w = -4$$

$$5) \frac{(2n-3)}{2} = \frac{(-n-1)}{4}$$

$$4(2n-3) = 2(-n-1)$$

$$8n - 12 = -2n - 2$$

$$10n - 12 = -2$$

$$\frac{10n}{10} = \frac{10}{10} \quad n = 1$$

$$6) \frac{4x(5)}{8} = \frac{4x(5)}{8} + 1(4)(5)$$

$$5x = 4x + 20$$

$$-4x = -4x$$

$$x = 20$$

$$7) \frac{4x(6)}{8} + \frac{6x(8)}{8} = 7(6)(8)$$

$$8x + 6x = 336$$

$$\frac{14x}{14} = \frac{336}{14}$$

$$x = 24$$

$$8) \frac{5(x+1)}{3} + \frac{3(x+5)}{3} = 4(3)(5)$$

$$5(x+1) + 3(x+5) = 60$$

$$5x+5+3x+15 = 60$$

$$8x+20 = 60$$

$$-20 \quad -20$$

$$\frac{8x}{8} = \frac{40}{8}$$

$$x = 5$$

$$9) \frac{6(y+1)}{2} - \frac{2(y-7)}{2} = 3(2)(6)$$

$$6(y+1) - 2(y-7) = 36$$

$$6y+6-2y+14 = 36$$

$$4y+20 = 36$$

$$-20 \quad -20$$

$$\frac{4y}{4} = \frac{16}{4}$$

$$y = 4$$

$$10) \frac{2(4m+5)}{2} - \frac{3m}{2} = -m(3)(2)$$

$$2(4m+5) - 3m = -6m$$

$$8m+10-3m = -6m$$

$$-m+10 = -6m$$

$$+m \quad +m$$

$$10 = -5m$$

$$-5 \quad -5$$

$$-2 = m$$