

Solving Equations-Addition and Subtraction

	Problem uses what operation? (circle one)	Inverse Operation (circle one)	Solve the Problem (show all work)	Check Step (substitute your solution back into the equation)
1	+ - x +	+ - x +	$m + 17 = 52$ $-17 \quad -17$ $m = 35$	
2	+ - x +	+ - x +	$d - 3 = 12$ $+3 \quad +3$ $d = 15$	
3	+ - x +	+ - x +	$22.2 + x = 75$ $-22.2 \quad -22.2$ $x = 52.8$	
4	+ - x +	+ - x +	$5 + y = 103$ $-5 \quad -5$ $y = 98$	
5	+ - x +	+ - x +	$v + 0.5 = 4.25$ $-0.5 \quad -0.5$ $v = 3.75$	
6	+ - x +	+ - x +	$x - 3.2 = 16$ $+3.2 \quad +3.2$ $x = 19.2$	

7	$+ - x \div$	$+ - x +$	$z - 4 = 25$ $+11 \quad +11$ $z = 6.5$
8	$+ - x \div$	$+ - x +$	$x - 22 = 20$ $+22 \quad +22$ $x = 42$
9	$+ - x \div$	$+ - x +$	$\frac{1}{2} + b = 18$ $-\frac{1}{2} \quad -\frac{1}{2}$ $b = 17.5$
10	$+ - x +$	$+ - x +$	$\frac{1}{2} + n = 1\frac{5}{8}$ $-\frac{1}{2} \quad -\frac{1}{2}$ $n = \frac{1}{8}$
11	$+ - x +$	$+ - x +$	$x - 1.45 = 3.2$ $+1.45 \quad +1.45$ $x = 4.75$
12	$+ - x +$	$+ - x +$	$2\frac{3}{4} + a = 10\frac{1}{4}$ $-2\frac{3}{4} \quad -2\frac{3}{4}$ $a = 7\frac{3}{4}$

When you solve an equation...

Name _____

Unit 4 1-step Equations Organizer

Date _____

Period _____

Equation	Operation	Inverse Operation	Solve	Does it balance?
1 $\frac{9p}{9} = \frac{108}{9}$ $p = 12$	X	\div		
2 $\frac{132}{3} = \frac{3n}{3}$ $n = 44$	X	\div		
3 $\frac{84}{7} = \frac{7a}{7}$ $a = 12$	X	\div		

$$6 \times \frac{r}{6} = 4 \times 6$$
$$24$$

$$12 \times 11 = \frac{d}{12} \times 12$$
$$d = 132$$

$$13 \times \frac{u}{13} = 12 \times 13$$
$$u = 156$$

Try this!!!!

$$9 = \frac{117}{h}$$
$$117 \div 9$$
$$h = 13$$

Equations

(1) Identify the solution to each equation from the list given.

(a) $\frac{25 - 5x}{5} = \frac{3}{5}$, 3, 4, 5
 $5 = x$

(b) $27 + x = 34$, 16, 17, 18
 -17
 $x = 17$

(c) $6x + 21 = 57$, 5, 6, 7

$6x + 21 = 57$
 -21
 $6x = 36$

$x = \frac{36}{6}$ $x = 6$

(2) Write a real world problem where you would solve the equation $x - 6 = 12$

$x - 6 = 12$
 $+6$
 $x = 18$

Solve and Write Multiplication Equations

(1) On a family trip, the Schmidt family drove at an average speed of 38 miles per hour. The whole trip was 228 miles. Write and solve a multiplication equation to find how many hours they drove.

$\frac{38h}{38} = \frac{228}{38}$

$h = 6$ hours

(2) Solve each equation.

(a) $\frac{4d}{4} = \frac{112}{4}$
 $d = 28$

(b) $\frac{208}{8} = \frac{8d}{8}$
 $d = 26$

(c) $\frac{0.5d}{.5} = \frac{2.5}{.5}$
 $d = 6$

Solve and Write Addition Equations

(1) In 2014, Aaron Rodgers threw 38 touchdowns passes. In the same year, Aaron Rodgers and Peyton Manning threw 77 combined touchdowns passes. Write and solve an equation to find out how many touchdowns passes Peyton Manning threw in 2014.

$$P=39$$

$$\begin{array}{r} 38 + P = 77 \\ -38 \\ \hline P = 39 \end{array}$$

(2) Solve each equation.

$$(a) 13 + x = 41$$

$$\begin{array}{r} 13 + x = 41 \\ -13 \\ \hline x = 28 \end{array}$$

$$(b) 213 + m = 145$$

$$\begin{array}{r} 213 + m = 145 \\ -213 \\ \hline m = -68 \end{array}$$

$$(c) m + 16 = 6$$

$$\begin{array}{r} m + 16 = 6 \\ -16 \\ \hline m = -10 \end{array}$$

Solve and Write Subtraction Equations

(1) Mrs. Parker went to the grocery store and spent \$76. She was left with \$15 in her wallet. Write and solve a subtraction equation to find out how much money Mrs. Parker went to the store with.

~~there are~~

$$\begin{array}{r} P - 76 = 15 \\ +76 \\ \hline P = 91 \end{array}$$

(2) Solve each equation.

$$(a) n - 17 = 41$$

$$\begin{array}{r} n - 17 = 41 \\ +17 \\ \hline n = 58 \end{array}$$

$$(b) 174 - n = 68$$

$$\begin{array}{r} 174 - n = 68 \\ +68 \\ \hline 242 \end{array}$$

$$n = 242$$

$$(c) n - 17 = 36$$

$$\begin{array}{r} n - 17 = 36 \\ +17 \\ \hline n = 53 \end{array}$$

$$n = 53$$