January 11-15, 2106							
Solving Two Step Equations							
School Carto		MY HOMEWORK					
© MAZK ANDERSON	WWW.ANDERTOONS.	Monday: algebra tile worksheet					
		<b>Tuesday:</b> Tape Diagram Worksheet					
5	<b>Wednesday:</b> Solving Equations algebraically Worksheet						
	<b>Thursday:</b> Homework practice worksheet						
10.54	knew X was 7 the whole time d you never said anything?!"	<b>Friday:</b> Quiz No homework					
<b>I CAN</b> solve word problems leading to equations of the form px + q = r and $p(x + q) = r$ , where $p$ , $q$ , and $r$ are specific rational numbers. <b>I CAN</b> solve equations of these forms fluently. <b>I CAN</b> compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach							
MY VOCABULARY							
Inverse operations	Operations that undo each other's effect. For example, addition and subtraction are inverse operations. So are multiplic and division.						
Distributive property	The distributive property sto that multiplying a sum by a number gives the same res multiplying each addend b number and then adding t products together. $4 \times (2 + 3) = 4 \times 2 + 4 \times 3$	ult as by the ne					

NAME\_\_\_\_\_

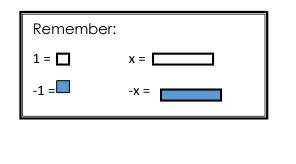
## BELL RINGERS



Complete the Bell Ringer from the board

MONDAY	TUESDAY		
WEDNESDAY	THURSDAY		

## Solving Two Step Equations with Algebra Tiles



2x + 5 = 13	
4x - 3 = 9	
-x + 5 = 1	
3(x + 2) = 15	
2 ( 2x -1) = 10	



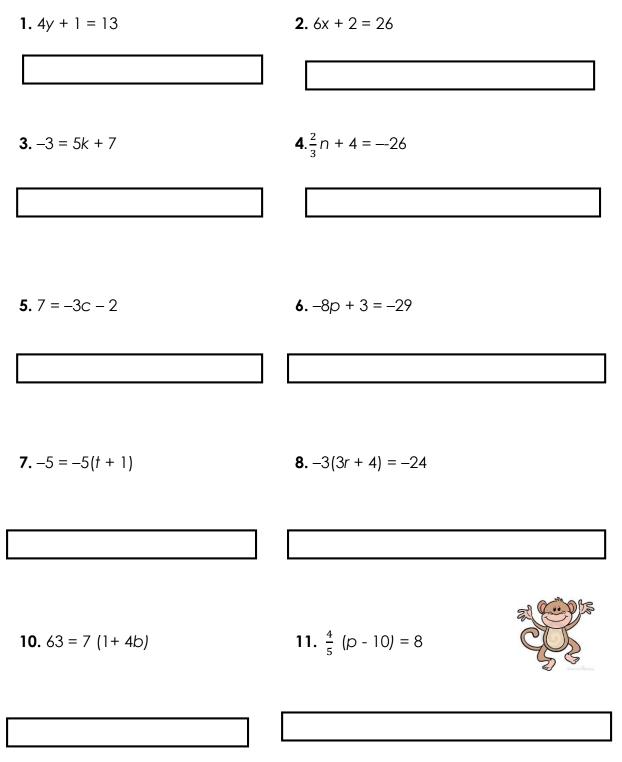
## Solving Two Step Equations with Algebra Tiles

Homework (Monday)

2x +1 = 5	3x + 2 = 11		
4x + 3 = -5	2x - 1 = 7		
5x - 2 = -7	3x - 4 = 5		
2x - 3 = 15	3(x - 5) = 9		
3x - 2 = -8	2(x + 2) = -8		

### Solving Two Step Equations with Tape Diagrams

#### **EXAMPLES:**



#### Solving Two Step Equations with Tape Diagrams

HOMEWORK (TEUSDAY)

**1.** 2x + 1 = 9

**2.** 5b + 2 = 17

**3.** 3w + 5 = 23

**4.**  $\frac{3}{8}n + 1 = -25$ 

**5.** 2(2*t* - 1) = 20

**6.** 7*k* − 3 = 32

**7.** 8x − 1 = 63

**8.** 5(2x - 1) = 35

**9.**  $\frac{1}{6}(a+12) = -4$ 

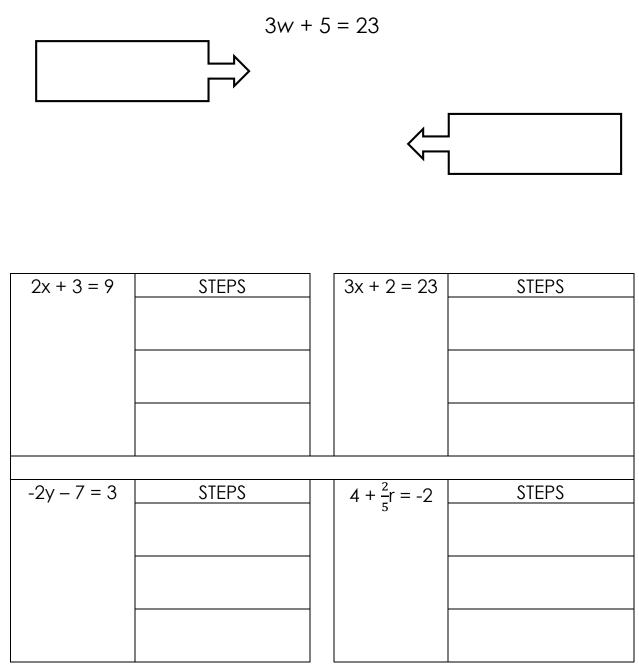
**10.** 9 + 4b = 17



### Solving Two Step Equations Algebraically

Two step equations are equations that can be solved in to steps. One step is to undo the addition or subtraction, the other is to undo the multiplication or division.

EXAMPLE:



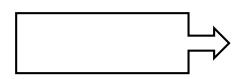
Some two step equations can be solved more than one way!

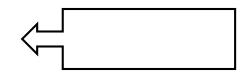
2(w + 3) = 14

EXAMPLE:

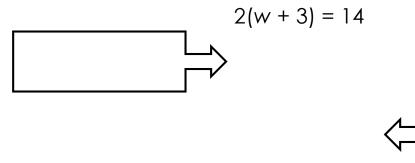
#### Method 1

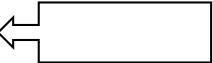






Method 2









2(x + 3) = 10	STEPS		2(x + 3) = 10	STEPS
	I	I I		
3(2y-3) = -33	STEPS		3(2y-3) = -33	STEPS
1	CTEDC		1	CTEDC
$\frac{1}{4}(8x + 12) = 7$	STEPS		$\frac{1}{4}(8x + 12) = 7$	STEPS

#### Solving Two Step Equations Algebraically

HOMEWORK (WEDNESDAY)

Solve each equation algebraically. SHOW ALL WORK!!!! For # 1 – 5 explain each step.

**1.** 2x + 1 = 9 **2.** 5b + 2 = 17

**3.** 
$$3w + 5 = 23$$
 **4.**  $\frac{3}{8}n + 1 = -25$ 

**5.** 4*t* − 2 = 14

**6.** 7k - 3 = 32 **7.** 8x - 1 = 63

**8.** 
$$2x - 5 = 15$$
 **9.**  $2 + \frac{1}{6}a = -4$ 

**10.** 
$$9 + 4b = 17$$
 **11.**  $2p + 14 = 0$ 

**12.** 
$$3y + \frac{2}{5} = -\frac{1}{5}$$
 **13.**  $-\frac{2}{3}$  w + 5 = 4

## Solving Two Step Equations Algebraically

## Checking your work

Solve each equation. Check your solution.

**1.** 2x + 1 = 9

**2.** 5b + 2 = 17

**3.** 3w + 5 = 23

**4.** 
$$\frac{3}{8}n + 1 = -25$$

**5.** 4*t* – 2 = 14

# Homework Practice (Thursday)

## Solve Two-Step Equations

Solve each equation. Check your solution.

**1.** 
$$4h + 6 = 30$$
 **2.**  $\frac{2}{7}y + 5 = -9$ 

**3.** 
$$-3t + 6 = 0$$
 **4.**  $-8 + 8g = 56$ 

**5.** 
$$5k - 7 = -7$$
 **6.**  $19 + 13x = 32$ 

**7.** 
$$-\frac{1}{5}b - \frac{2}{5} = -2$$
 **8.**  $1n + 1 = 11$ 

**9.** 
$$\frac{3}{4}f + 5 = -5$$
 **10.**  $5d - 3.3 = 7.2$ 

**11.** 3 = 0.2m - 7

**12.** 1.3z + 1.5 = 5.4

**13. KITTENS:** Kittens weigh about 100 grams when born and gain 7 to 15 grams per day. If a kitten weighed 100 grams at birth and gained 8 grams per day, in how many days will the kitten triple its weight?

**14. TEMPERATURE:** Room temperature ranges from 20°C to 25°C. Find the range of room temperature in °F. Use the formula F - 32 = 1.8C to convert from the Celsius scale to the Fahrenheit scale.