Name:	 Class Period:	

1.2

# Algebra Agenda

### No School Mon 9/7

				Stamp
Monday	8/31/2015	Objective:	Solving Multi-Step Equations	
		Assignment:	Punchline #1-18	
Tuesday	9/1/2015	Objective:	Solving Multi-Step Equations Day 2	
		Assignment:	Practice #1-12	
sday	9/2/2015	Objective:	Solving Multi-Step Inequalities	
Wednesday		Assignment:	Practice #1-11	
Thursday	9/3/2015	Objective:	Solving Multi-Step Inequalities Day 2	
Thur		Assignment:	Practice #1-19	
ay		Objective:	Literal Equations	
Friday	9/4/2015	Assignment:	HW 1.2 Due! Separate HW page due Tues!!	

inal Weekly	HW Grade:	



Name: \_\_\_\_\_ Period: \_\_\_\_\_

Monday

thursday

Tuesday

Friday

Wednesday

**CHALLENGE** 



## Why Do Cowboys Have So Much Trouble With Math?



Solve each equation or problem and find your solution in the answer column. Write the letter of the answer in each box that contains the exercise number. If the answer has a \_\_\_\_, shade in the box instead of writing a letter in it.

(2) 
$$9n - 2 = 7n + 50$$

$$\bigcirc$$
 18 – 5 $y = y + 4$ 

$$(4)$$
  $-7a - 10 = 20 - 3a$ 

$$(5)$$
 11d = 81 – 16d

$$(6)$$
  $-22 - x = 5 + 6x + 9$ 

$$(7)$$
  $10b - 25 - 3b = 4b - 1$ 

$$8 33 +15w = 3w - w + 4w$$

- (9) The Sun Spa charges annual dues of \$125 plus \$10 per hour to use the facilities. The Moon Spa charges annual dues of \$230 plus \$7 per hour to use the facilities. For what number of hours would the two spas charge the same total amount?
- (10) 9(m-2) = m+40

$$\mathbf{11} \ 3(2p+7) = 15(p-4)$$

$$\mathbf{12} \ 5x + 2(11 - 4x) = 82 + x$$

**12** 
$$5x + 2(11 - 4x) = 82 + x$$
 **13**  $16 - 5(3t - 4) = 8(-2t + 11)$ 

**14** 
$$7(7c+1) - 4c = 13(3c-2)$$
 **15**  $12(5+2y) = 4y - (6-9y)$ 

$$\mathbf{15} \ 12(5+2y) = 4y - (6-9y)$$

$$\mathbf{16} \ 3q - 16q = 7 + 2(-8q - 3)$$

**16** 
$$3q - 16q = 7 + 2(-8q - 3)$$
 **17**  $14 - 3(5t - 12) = 1 - (20t + 1)$ 

(18) Simon says: "Five times my age 4 years ago is the same as 3 times my age in 2 years." How old is Simon now?



- **P**  $-3\frac{2}{3}$
- **T**) 3
- **E**  $2\frac{1}{3}$
- **(D)** 35
- (C)  $-4\frac{1}{4}$
- **S**) 26
- - $(\mathbf{R}) 10$
  - **B**  $-7\frac{3}{4}$
  - 52
  - $\mathbf{\hat{w}} 7\frac{1}{4}$
  - **F** 12
  - $\mathbf{H} \frac{1}{3}$
  - **(Y)** –15

#### **Practice - Solving Multi Step Equations Day 2**

Name \_\_\_\_\_\_ Per \_\_\_\_\_

#### Solve each equation and check your answer. Be sure to show all work

1. 
$$6x + 7 = 8x - 13$$

2. 
$$2(5n - 2) = 4(n + 2)$$

3. 
$$4(2a - 8) = \frac{1}{7}(49a + 70)$$

4. 
$$x + 4 = \frac{-3x - 7}{2}$$

5. 
$$-x+3=-\frac{4}{7}x$$

6. 
$$28 - 2.2y = 11.6y + 262.6$$

7. 
$$-8 - 3x = x - 4(2 + x)$$

8. 
$$6(y + 2) - 4 = 6y$$

Define a variable, set up an equation, then solve. Write your answer in a complete sentence.				
9. Two less than 2 times a number is 64 plus the same number. Find the number.				
10. Twice the greater of two consecutive odd integers is 13 less than three times the lesser. Find the				
integers.				
11. A moving company charges \$800 plus \$16 per hour. Another moving company charges \$720 plus				
\$21 per hour.				
How long is a job that costs the same no matter which company they use?				
12. The measure of an angle is 75° more than its supplement. Find the measure of each angle.				

#### **Practice - Solving Multi Step Inequalities**

Name \_\_\_\_\_\_ Per \_\_\_\_\_

Solve each inequality and check your answer. Be sure to show all work

1. 
$$3x \le 5x + 8$$

$$2. -3r < 10 - r$$

3. 
$$4x > 3(7 - x)$$

4. 
$$-4(3-p) \ge 5(p+1)$$

5. 
$$2(x-2) \le -2(1-x)$$

6. 
$$-5(k-1) \ge 5(2-k)$$

7. 
$$-7x - 10 + 5x \le 3(x + 4) + 8$$

8. 
$$-2(x-7)-4-x<8x+32$$

- 9. Write and solve an inequality to find the sales Mrs. Jones needs if she earns a monthly salary of \$2000 plus a 10% commission on her sales. Her goal is to make at least \$4000 per month. What sales does she need to meet her goal?
- 10. Edgar and Raul are playing video games. Edgar's score is 180 and he scores 5 points per second. Raul's score is 100 and he scores 8 points per second. How long will it be before Raul takes the lead?
- 11. The measure of an angle is no more than one-fourth its supplement. Find the maximum measure of the smaller angle.

#### Practice - Solving Multi Step Inequalities Day 2

Name \_\_\_\_\_\_ Date \_\_\_\_\_ Per \_\_\_\_\_

Solve each inequality and check your answer. Be sure to show all work

1. 
$$6(x+4)-(x+3) \ge x-1$$

2. 
$$0 < 4(6-x) + 7x$$

3. 
$$6 - \frac{5}{2}x \ge 26$$

4. 
$$12-4(x-5) < 8+x$$

5. Which of the following inequalities is not equivalent to  $23 - 5(x + 3) \le 18$ ?

A. 
$$23 - 5x - 15 \le 18$$

B. 
$$-5x - 15 \le -5$$

C. 
$$-5x \ge 10$$

C. 
$$x \ge -2$$

- 6. Fernando is starting a new sales job and needs to decide which of two salary plans to choose from. For Plan A, he will earn \$100/week plus 15% commission on all sales. For Plan B, he will earn \$150/week plus 10% commission on all sales. For what amount of weekly sales is Plan B better than Plan A?
- 7. To cater a brunch, Frankie's Cafe charges a \$130 setup fee plus \$12.50 per person. The cost of Jackson Enterprise's annual holiday party cannot exceed \$1500. If Jackson Enterprise hires Frankie's Cafe to cater their annual holiday party, how many people can they invite to the party?
- 8. Ice-cream stays solid at Fahrenheit temperatures below  $10^{\circ}$ . The formula  $F = \frac{9}{5}C + 32$  can be used to convert Celsius temperatures to Fahrenheit temperatures F. Determine in terms of an inequality those Celsius temperatures for which ice-cream stays solid.
- 9. For a direct-mail campaign, National Advertising determines that any envelope with a fixed width of 2.5 inches and an area of at least 18.5 square inches can be used. Determine in terms of an inequality those lengths that will satisfy the company constraints.