



## Test Review Questions

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Page 310(Practice test)

#3    #10  
#4    #11  
#7    #15  
#8    #16

#2  
#3  
#4  
#5  
#6

Test on Wednesday Feb 27

As well you have a Worksheet

## Warm-UP

Test Tomorrow

Solve and graph the following:

1)  $6y - 5 = 19.5$

2)  $\frac{2x}{7} + 3 = -5$

3)  $-4x + 10 < -7x - 5$

4)  $\frac{1}{2}(x + 5) \geq \frac{2}{3}(x - 6)$

5)  $6x - 2x + 5 - 3 = -14 - 3x + 5x + 4$



## Warm-UP

Test Tomorrow

Solve and graph the following:

1)  $6y - 5 = 19.5$

$$\frac{6y}{6} = \frac{24.5}{6}$$

$$y = \frac{24.5}{6} = 4.08$$

Verify

LH

$6y - 5$

$6\left(\frac{24.5}{6}\right) - 5$

$24.5 - 5$

$19.5$

RH

$19.5$

Verify

LH

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

$\frac{2(-28)}{7} + 3$

$\frac{-56}{7} + 3$

$-8 + 3$

$-5$

RH

$-5$

2)  $\frac{2x}{7} + 3 = -5$

$$2x + 21 = -35$$

$$\frac{2x}{2} = \frac{-56}{2}$$

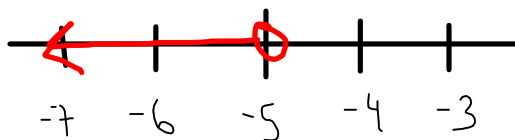
$$x = -28$$

$$3) \quad \boxed{-4x} + 10 < \boxed{-7x} - 5$$

$$3x + 10 < -5$$

$$\frac{3x}{3} < \frac{-15}{3}$$

$$x < -5$$



Verify:  $x < -5$

x	LH	<	RH
-6	$-4x - 10$		$-7x - 5$
	$-4(-6) - 10$		$-7(-6) - 5$
	$24 - 10$		$42 - 5$
	$14$	$<$	$37$

True

$$4) \quad \frac{1}{2}(x + 5) \geq \frac{2}{3}(x - 6)$$

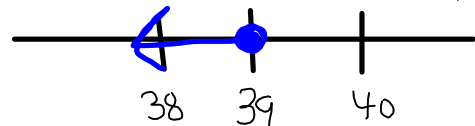
$$\frac{1}{2}x + \frac{5}{2} \geq \frac{2}{3}x - \frac{12}{3}$$

$$\boxed{3x} + 15 \geq \boxed{4x} - 24$$

$$15 \geq x - 24$$

$$39 \geq x$$

$$x \leq 39$$



## Warm-UP

Test Tomorrow

Solve and graph the following:

$$5) \quad \underbrace{6x - 2x}_{4x} + \underbrace{5 - 3}_{2} = \boxed{-14} - \underbrace{3x + 5x}_{2x} + \boxed{4}$$

$$4x + 2 = 2x - 10$$

$$4x^{-2x} + 2 = 2x^{-2x} - 10$$

$$2x + 2^{-2} = -10^{-2}$$

$$\frac{2x}{2} = \frac{-12}{2}$$

$$x = -6$$

Solve and graph the following:

(Show all work)

$$-2.5v + 4.7 \geq -3.8v + 1.58$$

$$\begin{array}{l} +3.8v \quad +3.8v \\ -2.5v + 4.7 \geq -3.8v + 1.58 \end{array}$$

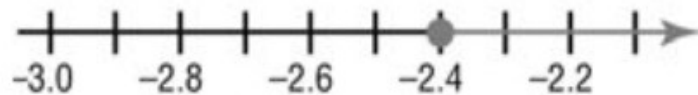
$$1.3v + 4.7 \geq 1.58$$

$$\begin{array}{l} -4.7 \quad -4.7 \\ 1.3v + 4.7 \geq 1.58 \end{array}$$

$$1.3v \geq -3.12$$

$$\frac{1.3v}{1.3} \geq \frac{-3.12}{1.3}$$

$$v \geq -2.4$$



## Solving Equations (Section 6.1-6.2)

Name \_\_\_\_\_  
Date \_\_\_\_\_ Period \_\_\_\_\_

Solve each equation. (Show all work.)

1)  $-4 = 2(x - 6)$

2)  $-54 = n + 4(n - 6)$

3)  $5(1 - 7m) = 40$

4)  $-6(2 + 7r) = -54$

5)  $-12 = -4 + 8(5x - 1)$

6)  $5(n + 1) = 45$

7)  $10b - 32 - 2b = -4(2 + b)$

8)  $-2(1 + 4v) = -6(3 + v)$

9)  $-2 = \frac{-3 + x}{8}$

10)  $2 = \frac{2}{3} + \frac{x}{4}$

11)  $\frac{2}{5}(x - 7) = \frac{1}{4}(2x - 1)$

12)  $-7 - 9k = 29$

- 13) Ted and Fred each have a Tractor Trailer Cleaning Business. Ted charges \$32 per hour and a flat rate of \$44 to clean a truck. Fred on the other hand charges a flat rate of \$100 and \$24 per hour to clean a truck. Use an equation to find out when they charge the

90

Math 9

Inequalities ICA

Solve and graph.

(Section 6.3-6.5)

Show all work

Name \_\_\_\_\_

Per/Sec. \_\_\_\_\_ Date \_\_\_\_\_

1.  $-3y \geq 24$



2.  $-2c \leq 26$



3.  $4 - c < 16$



4.  $15 < -k + 8$



5.  $3k + 8 \geq 17$



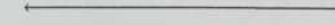
6.  $-9 \leq 2a - 25$



7.  $21 < -4 - 5a$



8.  $-3k + 14 < 2$



9.  $-9x + 71 \geq 17$



10.  $-25 < -4c - 13$



Write a scenario for each situation.

1) Karen needs to make a mark of at least 87 on his Math exam in order to pass the course.

2) Ted has a lemonade stand and it cost him \$3.15 to buy his cups and juice. He wants to buy an action figure for \$8.25 so he decided to sell his lemonade for \$0.57 per cup. Write an inequality that represents the situation. (Solve it)



## Unit 6-Equations &amp; Inequalities Test Review (Day 2)

Part 1) Solve each of the following.

1)  $4(x-1) + 4x = 2(3x+1)$

2)  $\frac{1}{2}(4x+2) = \frac{1}{3}(x-1)$

3)  $\frac{1x}{15} + \frac{1}{3} + \frac{2x}{5} + 4 = \frac{2}{15}$

4)  $3.2(x+7.2) = 1.2(4.2-x)$

5)  $3x-2+5x = 19$

6)  $12x+5 = 50-3x$

Part 2) Solve and graph each inequality

1)  $3x+7 \geq 4x+18$

2)  $18x-10 < 44$

3)  $\frac{1}{2}(x+7) \leq 2(3x-1)$

4)  $-12 > \frac{2}{3}c+4$

Part 3) Write the inequality that describes the situation and SOLVE

- 1) To cater a wedding Company A charges \$40 a plate and Company B charges \$15 plus a flat rate of \$300. When is it COMPANY B less than Company A?

- 2) Each class room in school can have no more than 29 students: \_\_\_\_\_

- 3) The minimum fine for speeding is \$172.50 : \_\_\_\_\_

- 4) In order to pass the next test you must make a mark of 60 or greater: \_\_\_\_\_

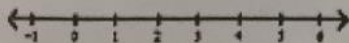
**Solve each equation.**

1)  $-7(2b+3) = -7$

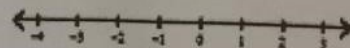
2)  $47 = -4(3n+1) + 3$

**Solve each inequality and graph its solution.**

3)  $20 < 5(1+x)$



4)  $6(1+4v) + 4v \leq -22$



Chapter 6 : Test Review WorksheetsSolving Equations (Section 6.1-6.2)

Answers :

- 1)  $x=4$       2)  $n=-6$       3)  $m=-1$       4)  $r=1$       5)  $x=0$   
 6)  $n=8$       7)  $b=2$       8)  $v=8$       9)  $x=-13$       10)  $x=\frac{16}{3}$   
 11)  $x=\frac{-51}{2}$       12)  $k=-4$       13)  $h=7$

Inequalities ICA (Section 6.3-6.5)

Answers :

- 1)  $y \leq 8$       2)  $c \geq -13$       3)  $c > -12$       4)  $k < -7$       5)  $k > 3$   
 6)  $a \geq 8$       7)  $a < -5$       8)  $k > 4$       1)  $m \geq 87$       2)  $c > 20$   
 3)  $h < 2.5$       ●

Unit 6 - Equations & Inequalities (Test review day 2)

Answers :

Part A

- 1)  $x=3$       2)  $x=\frac{-4}{5}$       3)  $x=-9$       4)  $x=-4.0\bar{9}$       5)  $x=\frac{21}{8}$       6)  $x=3$

Part B

- 1)  $x \leq -11$       2)  $x < 3$       3)  $x \geq 1$       4)  $c < -24$

Part C

- 1)  $p > 12$       2)  $c \leq 29$       3)  $m \geq 172.50$       4)  $m \geq 60$

Part D

- 1)  $b=-1$       2)  $n=-4$       3)  $x > 3$       4)  $v \leq -1$

## Unit 6-Equations &amp; inequalities Test Review (Day 2)

1)  $x = 3$

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

3)  $x = -9$

•

4)  $x = -4\overline{09}$

5)  $x = \frac{21}{8}$

6)  $x = 3$

## Part 2 Solve and graph each inequality

1)  $x \leq -11$



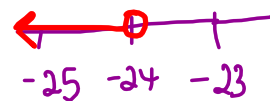
2)  $x < 3$



3)  $x \geq 1$



4)  $c < -24$



Part 3) Write the equation that describes the situation and then solve

1)  $p > 12$

2)  $c \leq 29$

3)  $m \geq 17250$

4)  $m \geq 60$

Solve each equation/inequality

1)  $b = -1$

2)  $n = -4$

3)  $x > 3$

4)  $v \leq -1$

