

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. $3k + 8 \geq 17$



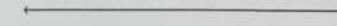
6. $-9 \leq 2a - 25$



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 & 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: _____

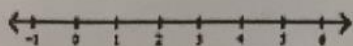
Solve each equation.

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

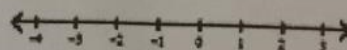
$$2) 47 = -4(3n+1) + 3$$

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) $k > 4$ 9) $m \geq 87$ 10) $c > 20$

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) $v \leq -1$