

Unit 2 - Equations and Inequalities Test Review Date _____ Period _____

Solve each equation.

1) $20 = 15 - m$

2) $30 = -6n$

3) $138 = 10 - 8x$

4) $-1 = \frac{r - 10}{25}$

5) $172 = 10x + 2$

6) $-1 = -2 + \frac{r}{12}$

$$7) b + 8 = 11 + 2b$$

$$8) -7 - 7m + 2m = 2m - 6m$$

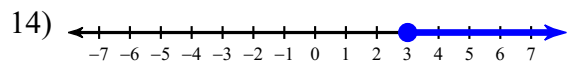
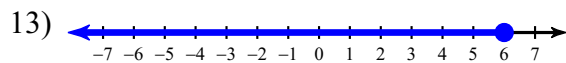
$$9) -35 - 4p = -1 - 6(1 + 3p)$$

$$10) -5a + 3(-a + 7) = 6a + 7(3 + 6a)$$

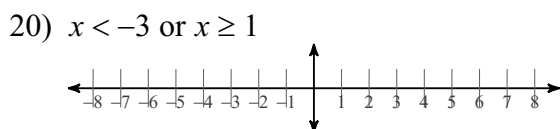
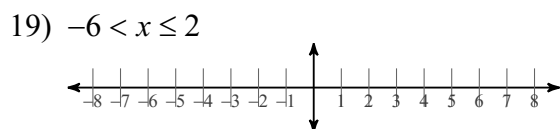
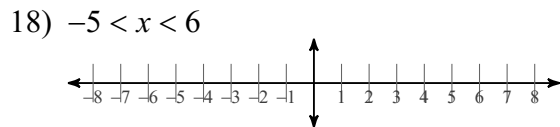
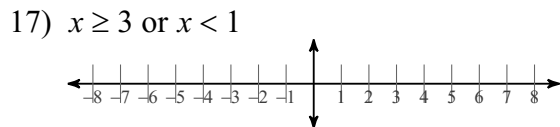
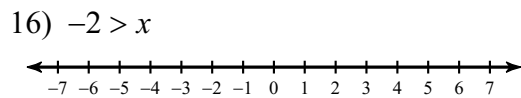
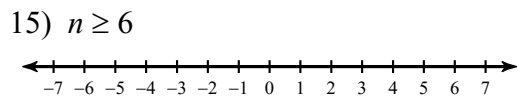
$$11) 4(2k - 8) = 2 - (-8k - 6)$$

$$12) 8(-2n + 7) = -8(2n - 7)$$

Write an inequality for each graph.



Draw a graph for each inequality.



Write an Inequality or Compound Inequality to represent each phrase.

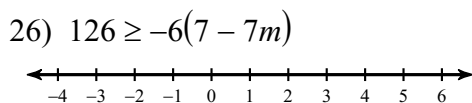
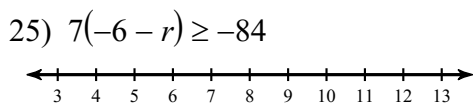
21) No more than 6 people can fit into my car.

22) you must be at least 52" to ride the rollercoaster.

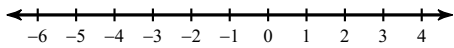
23) The person who portrays Mickey Mouse can be no shorter than 55 inches, and no taller than 62 inches.

24) Discounted tickets are provided for children 12 and under, and senior citizens 60 years old or older.

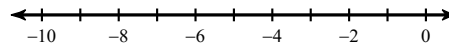
Solve each inequality and graph its solution.



$$27) -5(1 + 7x) > -37 - 3x$$

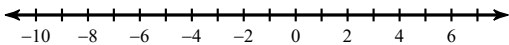


$$28) 2n + 1 > 7 + 7(6 + 2n)$$

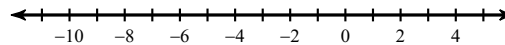


Solve each compound inequality and graph its solution.

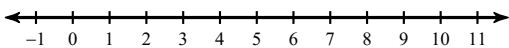
$$29) -6m + 1 \leq 43 \text{ and } 4 + 7m < 32$$



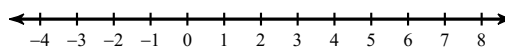
$$30) 1 - 5x > 9 - 9x \text{ or } 4x - 10 > 6x + 6$$



$$31) 17 \leq 7 + 10n \leq 87$$



$$32) -1 \leq 3 + 2p < 11$$



Answers to Unit 2 - Equations and Inequalities Test Review (ID: 1)

1) $\{-5\}$

2) $\{-5\}$

3) $\{-16\}$

4) $\{-15\}$

5) $\{17\}$

6) $\{12\}$

7) $\{-3\}$

8) $\{-7\}$

9) $\{2\}$

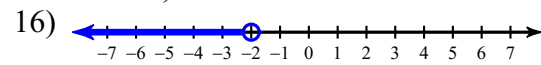
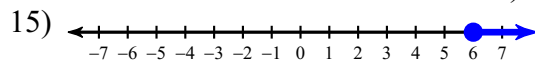
10) $\{0\}$

11) No solution.

12) { All real numbers. }

13) $a \leq 6$

14) $x \geq 3$



17)

18)

19)

20)

21) $p \leq 6$

22) $h \geq 52$

23) $55 \leq x \leq 62$

24) $a \leq 12$ or $a \geq 60$

$x \geq 55$ and $x \leq 62$

