

Unit 2 - Equations and Inequalities Test Review

Date _____ Period _____

Solve each equation.

1) $69.6 = -4.8n$

2) $-1.3 = 18.5 + p$

3) $138 = 10 - 8x$

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

5) $89.31 = -8.1x - 8.7$

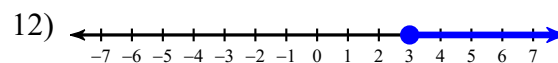
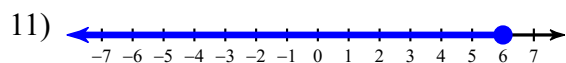
6) $4.6 - 0.1p = 3.42$

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

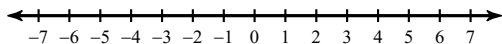
8) $-7 - 7m + 2m = 2m - 6m$

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

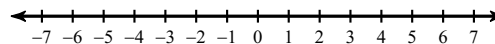
10) $-5a + 3(-a + 7) = 6a + 7(3 + 6a)$

Write an inequality for each graph.**Draw a graph for each inequality.**

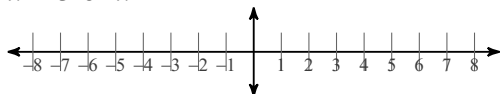
13) $n \geq 6$



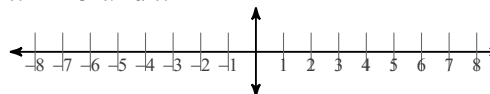
14) $-2 > x$



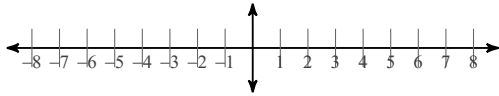
15) $x \geq 3$ or $x < 1$



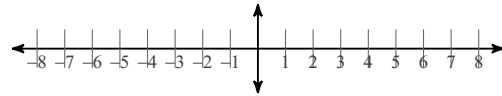
16) $x > -5$ and $x < -1$



17) $-6 < x \leq 2$



18) $x < 3$ or $x \geq -1$



Write an Inequality or Compound Inequality to represent each phrase.

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

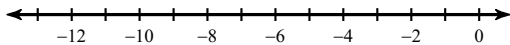
20) you must be at least 52" to ride the rollercoaster.

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

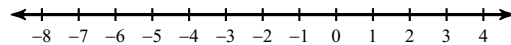
22) Discounted tickets are provided for children 12 and under, and senior citizens 60 years old or older.

Solve each compound inequality and graph its solution.

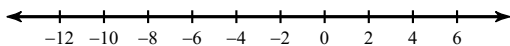
23) $n - 8 \geq -13$ or $\frac{n}{5} \leq -2$



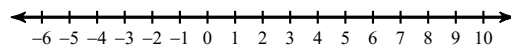
24) $-8m \leq -56$ or $\frac{m}{7} \leq 1$



25) $5x + 7 \leq -38$ or $3x + 4 \geq 16$



26) $2 + 8x \leq 9x - 4$ or $x - 7 > 4x - 1$



Solve each equation for the indicated variable.

27) $g = \frac{cx}{y}$, for x

28) $u = a + k + b$, for a

29) $g = \frac{16 + 16x}{y}$, for x

30) $u = 2x + 2y$, for x

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Solve each equation.

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$\{-14.5\}$

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$\{-19.8\}$

3) $138 = 10 - 8x$

$\{-16\}$

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

$\{-15\}$

5) $89.31 = -8.1x - 8.7$

$\{-12.1\}$

6) $4.6 - 0.1p = 3.42$

$\{11.8\}$

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

$\{-3\}$

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

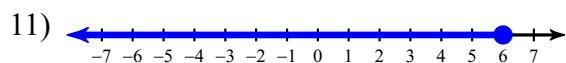
$\{-7\}$

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

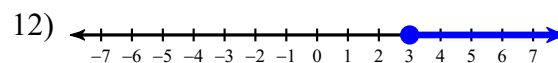
$\{2\}$

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

$\{0\}$

Write an inequality for each graph.

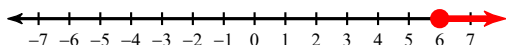
$a \leq 6$



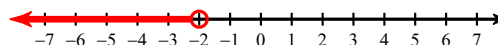
$x \geq 3$

Draw a graph for each inequality.

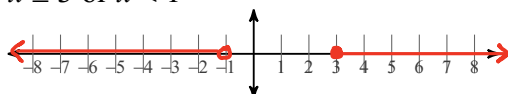
13) $n \geq 6$



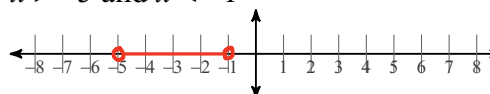
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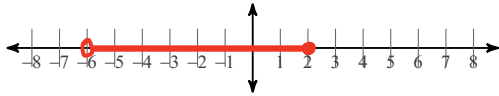
15) $x \geq 3$ or $x < -1$



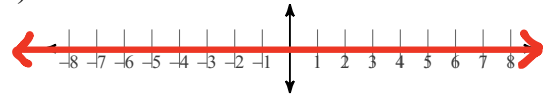
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All real numbers

Write an Inequality or Compound Inequality to represent each phrase.

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

$$p \leq 6$$

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

$$h \geq 52$$

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

$$55 \leq x \leq 62$$

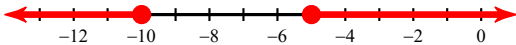
$$x \geq 55 \text{ and } x \leq 62$$

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

$$a \leq 12 \text{ or } a \geq 60$$

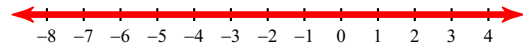
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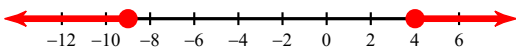
$$n \geq -5 \text{ or } n \leq -10$$

24) $-8m \leq -56$ or $\frac{m}{7} \leq 1$



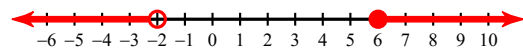
{ All real numbers. }

25) $5x + 7 \leq -38$ or $3x + 4 \geq 16$



$$x \leq -9 \text{ or } x \geq 4$$

26) $2 + 8x \leq 9x - 4$ or $x - 7 > 4x - 1$



$$x \geq 6 \text{ or } x < -2$$

Solve each equation for the indicated variable.

27) $g = \frac{cx}{y}$, for x

$$x = \frac{gy}{c}$$

28) $u = a + k + b$, for a

$$a = u - k - b$$

29) $g = \frac{16 + 16x}{y}$, for x

$$x = \frac{gy - 16}{16}$$

30) $u = 2x + 2y$, for x

$$x = \frac{u - 2y}{2}$$