

NAME _____

**MATH 115
REVIEW CHAPTER 9**

List the elements of the set.

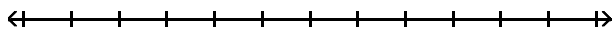
1) If $A = \{15, 17, 18, 19, 22\}$ and $B = \{15, 17, 18, 19\}$, list the elements of $A \cap B$.

1) _____

Solve the compound inequality. Graph the solution set.

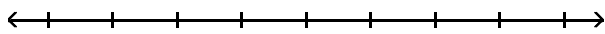
2) $6x < -6$ and $x + 6 > 3$

2) _____



3) $-5x + 1 \geq 11$ or $4x + 3 \geq -13$

3) _____



Solve the equation or inequality.

4) $|4x + 8| + 6 = 9$

4) _____

5) $|3x + 9| + 13 = 6$

5) _____

6) $|x - 2| = |3 - x|$

6) _____

7) $-1 \leq 2(x - 1) < 10$

7) _____

8) $|4k - 5| \geq 6$

8) _____

9) $|x - 3| + 9 \leq 16$

9) _____

10) $x \leq 4$ and $x \leq -2$

10) _____

11) $x < 3$ or $x < 8$

11) _____

12) $-9x > -36$ and $x + 9 > 6$

12) _____

13) $-7x + 1 \geq 15$ or $3x + 3 \geq -9$

13) _____

14) $\left| \frac{7x + 21}{3} \right| = 7$

14) _____

15) $|5k - 4| > -7$

15) _____

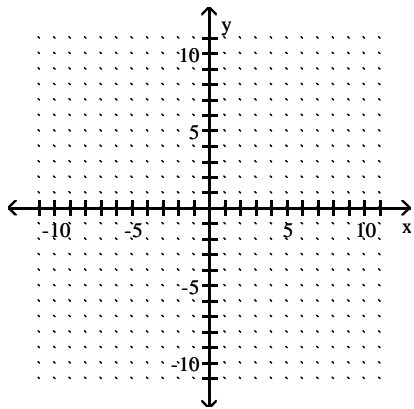
16) $0 \leq \frac{3x + 2}{3} < 3$

16) _____

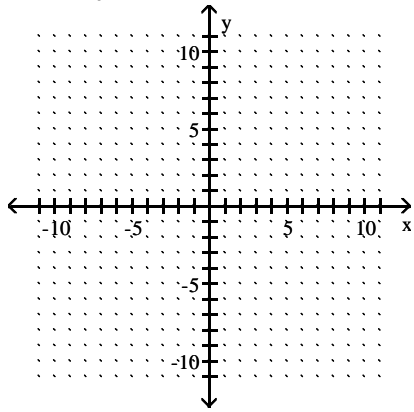
Graph the inequality.

17) $y \geq 4x$

17) _____



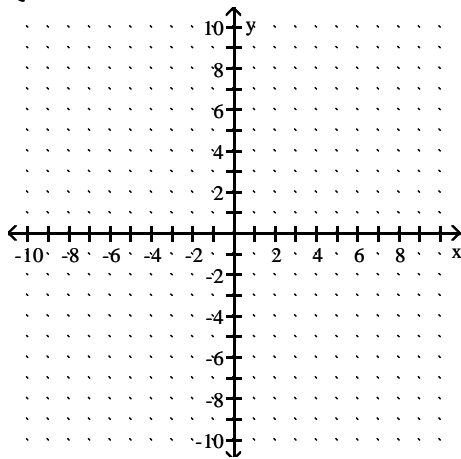
18) $3x + 5y > -15$



18) _____

Graph the solution of the system of linear inequalities.

19)
$$\begin{cases} 2x + y \leq 4 \\ y \leq 1 \end{cases}$$



19) _____

20) $\begin{cases} x + 2y \leq 2 \\ x + y \geq 0 \end{cases}$

20) _____

