Draw the graph of the solution set of each inequality.

1. $\mathrm{y} \leq 2 \mathrm{x}+1$
2. $y \geq 3 x-2$
3. $2 y-x>6$
(a) $y>x$
(b) $y<x$
(c) $y \geq x$
(d) $y \leq x$
4. The graph shown at the right is the graph of:
(a) $y \geq x$
(b) $x \geq y$
(c) $x \geq 0$
(d) $y \geq 0$
5. The graph shown at the right is the graph of:
(a) $y<3$
(b) $y<x+3$
(c) $y>x+3$
(d) $y<3 x+3$
6. $x-3 y \leq 9$
7. $x \leq-3$
8. $\mathrm{y}>4$
9. $y+3 \leq 0$

10. The graph shown at the right represents which of the following sets?
(a) $\{(x, y) \mid x<2\}$
(b) $\{(x, y) \mid x \leq 2\}$
(c) $\{(x, y) \mid y<2\}$
(d) $\{(x, y) \mid y \leq 2\}$
11. The graph shown at the right is the graph of:
(a) $y \leq 0$
(b) $y \geq 0$
(c) $\mathrm{x} \leq 0$
(d) $x \geq 0$
12. Which of the graph represents the inequality $\mathrm{y}<4$ ?
(a)

(b)


(c)

(d)

13. Which of the graph represents the inequality $\mathrm{y} \leq 2$ ?
(a)

(b)

14. The graph shown at the right is the graph of:
(a) $-1<x \leq 4$
(b) $-1 \leq x<4$
(c) $-1<x<4$
(d) $-1 \leq x \leq 4$
15. The graph shown at the right is the graph of:
(a) $\{(x, y) \mid x+y>-5\}$
(b) $\{(x, y) \mid-5 \leq x \leq 4\}$
(c) $\{(x, y) \mid-5 \leq x<4\}$
(d) $\{(x, y) \mid-5 \leq y<4\}$
(c)

(d)

16. Which ordered pair is in the solution set of $y>3 x+2$ ?
(a) $(1,5)$
(b) $(1,6)$
(c) $(5,1)$
(d) $(0,0)$
17. Which ordered pair is not in the solution set of $3 x-y \geq 2$ ?
(a) $(1,1)$
(b) $(1,-1)$
(c) $(-1,1)$
(d) $(0,-2)$

Fill in the blanks with "abscissa", "ordinate", "positive", "negative", or "zero".
20. The $x$-coordinate of a point is called the $\qquad$ and the y-coordinate is called the
$\qquad$ _.
21. A point in quadrant I has and $\qquad$ and an $\qquad$ that are both $\qquad$ -.
22. A point in quadrant III has and $\qquad$ and an $\qquad$ that are both
$\qquad$ —.
23. Both the $\qquad$ and the $\qquad$ of the origin are $\qquad$ .
24. Every point on the x-axis has an $\qquad$ of $\qquad$ .
25. Every point on the $y$-axis has an $\qquad$ of $\qquad$ -
26. The slope of a horizontal line is $\qquad$ .
27. The slope of a vertical line is undefined because the difference between the $\qquad$ s of any two points on the line is $\qquad$ , thereby leading to division by $\qquad$ .
28. The slope of a line is calculated by dividing the difference between the $\qquad$ s of two points on the line by the difference between the $\qquad$ s of those points.

Fill in the blanks with "horizontal", "vertical" or "parallel".
29. $A$ $\qquad$ line and a $\qquad$ line intersect at right angles.
30. A $\qquad$ line is $\qquad$ to the $x$-axis.
31. A $\qquad$ line is $\qquad$ to the $y$-axis.
32. If two lines are $\qquad$ then their slopes are equal.

