- 1. Point (-2, -4) is in which quadrant?
- **2.** Find the distance between points (3, 5) and (2, -1).
- 3. Find the midpoint of the line segment between points: (-4, 3) and (2, 5).
- **4.** Find the slope of the line containing points: (-2, 5) and (3, -4).
- **5.** Find the slope and the y-intercept of the line with equation: 2v + 10x = 7
- **6.** Graph the line with equation: 3y 2x = 12
- **7.** Find the equation of the line with slope 5 and through point (-2,3).
- **8.** Find the equation of the line that is parallel to line y + 2x = 4 and goes through point (2,-5).
- **9.** Find the equation of the line through points (3, 2) and (2, -5).
- **10.** Find the equation of the line that is perpendicular to line 2y x = 13 and goes through point (3, -2).
- **11.** Find the x and y intercepts of line: 5y 7x = 13
- **12.** Find the equation of the line that is parallel to the x axis and goes through point (5, 6).
- **13.** Find the equation of the line that is perpendicular to the x axis and goes through point (7,8).
- **14.** Find the equation of the line that is perpendicular to y = 3 and goes through (4, 5).
- **15.** The graph of x = -5 goes through quadrants .
- **16.** Which points are on line -5x = 3?

$$(2,13)$$
, $(-1,-8)$, $(-3,-12)$, $(4,23)$, $(0,3)$, $(1,9)$

- 17. Find the equation of the circle with center (-3,2) and radius 7.
- **18.** Find the center and radius: $(x 5)^2 + (y + 3)^2 = 9$
- **49.** Find the center and radius: $x^2 + y^2 10x + 6x = 1$
- **20.** Find the solution of the system of equations:

$$2x + 5y = -4$$

$$4x + 7y = -2$$

21. Find the solution of the system of equations:

$$3x - 2y = -8$$
$$5x + 3y = -7$$

22.
$$|2x - 1| = 5$$

23.
$$|3x + 2| < 7$$

23.
$$|3x + 2| < 7$$
 24. $|2x + 1| > 5$

Answers:

1	III	2	$\sqrt{17}$
3	(-1,4)	4	- 9
			5
5	$m = -5; \left(0, \frac{7}{2}\right)$	6	6
			3
			2
7	y = 5x + 13	8	y = -2x - 1
9	y = 7x - 19	10	y = -2x + 4
11	$y = 7x - 19$ $\left(-\frac{13}{7}, 0\right); \left(0, \frac{13}{5}\right)$	12	y = 8
13	x = 7	14	x = 4
15	II and III	16	(2,13), (-3,-12), (4,23), (0,3)
17	$(x+3)^2 + (y-2)^2 = 49$	18	(5, -3), 3
19	$(5, -3), \sqrt{35}$	20	x = 3, y = -2
21	x = -2, y = 1	22	3, –2
23	$x = -2, y = 1$ $-3 < x < \frac{5}{3}$	24	x > 2 or x < -3