

Assignment

Date _____ Period _____

Sketch the graph of each line.

1) $x - 5y = -25$

2) $x + y = 4$

3) $3x + y = 3$

4) $y = 4$

5) $x = -3$

6) $4x - y = -1$

Find the midpoint of the line segment with the given endpoints.

7) $(-1, 4), (5, -3)$

8) $(-3, -5), (6, 2)$

Given the midpoint and one endpoint of a line segment, find the other endpoint.

9) Endpoint: $(6, 1)$, midpoint: $(6, 3)$

10) Endpoint: $(0, -4)$, midpoint: $(2, 1)$

Find the distance between each pair of points.

11) $(-3, -7), (3, 2)$

12) $(8, 2), (2, -4)$

Find the slope of the line through each pair of points.

13) $(14, -4), (6, -9)$

Find the slope of each line.

14) $4x + 3y = -15$

Find the slope of a line parallel to each given line.

15) $x + 2y = 0$

16) $y = -2x - 4$

Find the slope of a line perpendicular to each given line.

17) $y = -6x - 1$

18) $5x - 4y = 8$

Write the slope-intercept form of the equation of the line through the given points.

19) through: $(0, 4)$ and $(5, 1)$

Write the slope-intercept form of the equation of the line described. (parallel)

20) through: $(1, 5)$, parallel to $y = 3x + 5$

21) through: $(-4, -2)$, parallel to $y = \frac{3}{2}x - 4$

22) through: $(2, -4)$, parallel to $y = -\frac{5}{2}x + 3$

23) through: $(3, 1)$, parallel to $y = \frac{2}{3}x - 3$

Write the slope-intercept form of the equation of the line described. (perpendicular)

24) through: $(-2, -2)$, perp. to $y = -x - 4$

25) through: $(5, -5)$, perp. to $y = \frac{5}{3}x$

26) through: $(-1, 0)$, perp. to $y = \frac{1}{5}x + 5$

27) through: $(3, -4)$, perp. to $y = 0$