

NTID 8 ACT Review

Date _____ Period _____

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

1) $(-2, -2), (1, 1)$

2) $(4, -2), (1, 1)$

Find the other endpoint of the line segment with the given endpoint and midpoint.

3) Endpoint: $(-1, 8)$, midpoint: $(0, 3)$

4) Endpoint: $(1, 6)$, midpoint: $(-6, 7)$

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

5) $3y = -6 - 2x$

6) $-4y + 3x = 12$

7) $6x = 3y + 6$

8) $-2 + 2y = -x$

Find the slope of each line.

9) $3x - 10 = 5y$

10) $0 = -9y - 6x + 45$

Find the distance between each pair of points.

11) $(-4, 2), (2, 4)$

12) $(-1, -3), (-2, -4)$

Write the slope-intercept form of the equation of each line.

13) $y = -7$

14) $5x - 4y = 8$

15) $-4x + 3y = 11$

16) $-12 + 4y = -7x$

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

17) through: $(0, 5)$ and $(4, 5)$

18) through: $(5, 3)$ and $(0, -2)$

Write the slope-intercept form of the equation of the line described.

19) through: $(4, 2)$, parallel to $y = -\frac{1}{8}x - 4$

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

21) through: $(1, -1)$, perp. to $y = -\frac{5}{3}x + 1$

22) through: $(4, -1)$, perp. to $y = x - 1$

Write the standard form of the equation of the line described.

23) through: $(-1, 1)$, perp. to $y = x - 3$

24) through: $(-1, -4)$, perp. to $y = -\frac{1}{3}x + 4$

25) through: $(3, -4)$, parallel to $y = -x - 5$

26) through: $(-3, -2)$, parallel to $y = -x - 4$

Write the standard form of the equation of the line through the given points.

27) through: $(2, 0)$ and $(-3, -4)$

28) through: $(-5, 3)$ and $(-2, -4)$

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

29) through: $(5, 4)$ and $(3, -4)$

30) through: $(-4, 0)$ and $(-4, 5)$

Write the point-slope form of the equation of the line described.

31) through: $(-4, 5)$, parallel to $y = -x + 5$

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

33) through: $(3, 4)$, perp. to $y = -\frac{1}{4}x + 1$

34) through: $(3, -1)$, perp. to $y = -\frac{5}{3}x + 3$