

It's linear!

Write the equation of a line that contains the given y-intercept and slope in $y=mx + b$ form.

1) $m = -2, (0,5)$

2) $m = 1, (0,9)$

3) $m = 0, (0,-2)$

4) $m = -7, (0,4)$

5) $m = \text{undefined}, (0,1)$

6) $m = -7, (0,0)$

Find the ~~slop~~ and y-intercept for the following equations.

7) $y = 2x + 1$

8) $2x - 2y = 8$

9) $2x + 3y = 9$

10) $4x - 2 = y$

11) $-4x + y = -8$

12) $3x + y = -5$

13) $y = 7$

14) $5x + 2y = -6$

Find the equation of the line with the given ~~slop~~ and point. Give answers in $y=mx +b$ form.

15) $m = \frac{1}{5}, (10,1)$

16) $m = -\frac{4}{3}, (6, -4)$

17) $m = 8, (0,4)$

18) $m = -3, (-1,5)$

19) $m = -3, (-1,5)$

20) $m = 4, (1,3)$

21) $m = 6, (2,2)$

22) $m = \text{undefined}, (4,2)$

23) $m = 5, (4,11)$

24) $m = -3, (4, -5)$

Write the equation of the line passing through the given points. Give answers in $y = mx + b$ form.

25) $(4,0), (6, -8)$

26) $(1,7), (-2,1)$

27) $(-2,2), (2, -8)$

28) $(5,5), (7,5)$

29) $(-4,3), (2,0)$

30) $(5, -6), (-6,5)$

31) $(0,0), (-2,4)$

32) $(2,5), (7,0)$

33) $(-1, -3), (1, -2)$

34) $(-3,3), (-1,3)$

35) $(1,3), (,9)$

36) $(-4,1), 3, -6)$

37) $(-4,1), (-3, -20)$

38) $(3,2), (5,6)$