

NAME: _____

P.I. A.A.34: Write the equation of a line, given its slope and the coordinates of a point on the line

1. Find the equation of the line, in slope-intercept form, that passes through the point $(-3, 2)$ and has slope 3.
2. Find the equation of the line, in slope-intercept form, that passes through the point $(-2, 4)$ and has slope 4.
3. Find the equation of the line, in slope-intercept form, that passes through the point $(-3, 5)$ and has slope 2.
4. Write an equation of the line with slope 7 and y -intercept -9 .
5. Write an equation of the line with slope 6 and y -intercept 17.
6. Write an equation of the line with slope 1 and y -intercept -18 .
7. Write two different linear equations that have y -intercepts of 3.
8. Write an equation with a slope of -3 . Graph your equation.
9. Write the equations of two different linear equations with the same slope but different y -intercepts.
10. Create a table of data that shows a linear relationship in which both the slope and the y -intercept are fractions or mixed numbers. Write an equation for the relationship.

[1] $y = 3x + 11$

[2] $y = 4x + 12$

[3] $y = 2x + 11$

[4] $y = 7x - 9$

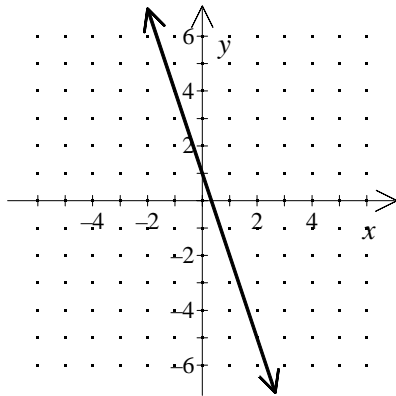
[5] $y = 6x + 17$

[6] $y = x - 18$

Answers will vary. Sample: $y = x + 3$ and

[7] $y = 2x + 3$

Answers may vary. Sample: $y = -3x + 1$



[8]

Answers will vary. Sample: $y = -3x + 2$,

[9] $y = -3x - 5$

Answers may vary. Sample:

[10]

x	3	5	7	9	11
y	7	10	13	16	19

, $y = \frac{3}{2}x + \frac{5}{2}$