

Chapter 5

5.1 Writing Linear Equations in Slope-Intercept Form

Slope-Intercept Form

Example:

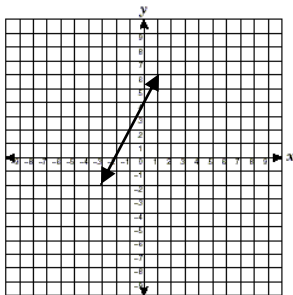
Practice:

Write the equation of the line in slope-intercept form

1. $m=3$, $b=7$

2. $m= -5$, $b= -1$

3.



5.2 Writing Linear Equations Given a Slope and a Point

Examples

Practice

Write an equation of the lines described below.

1. Through (2,4) $m=2$

2. Through (-5,-1) $m= -1/2$

3. Parallel to $y=5x-3$ and through (-2,6)

5.3 Writing Linear Equations Given Two Points

Examples

Practice

Write the equation of the following lines.

1. Through (2,8) & (-5,1)

2. Through (5,-6) & (-2,1)

3. Perpendicular to $y=3x-4$ and through (5,4).

5.5 Point-Slope Form of a Linear Equation

Examples

Practice

Write in the equation of the line in Point-Slope Form

1. Through $(3,-4)$ & $(5,-3)$

2. Through $(-4,6)$ & $(8,-3)$

Use Point-Slope form to write the equation of the line then re-write in Slope-Intercept Form.

3. Through $(-3,-5)$ with $m=2$

4. Through $(-1,9)$ with $m=-2$

5.6 The Standard Form of a Linear Equation

Examples

Practice

Write Standard Form of the equation of the following lines.

1. Through (2,5) with $m=-3$

2. Through (-4,6) with $m=2$

3. Through (3,7) & (3,1)

4. Through (-1,8) & (2,-2)

5. Through (2,-5) & (-7, -5)