Week 1: Assignment 1

Due date: Week 1 Monday, 11:59PM

1. In the linear equation y = mx + c, what does m represent?
   - y-intercept
   - y-axis
   - slope
   - origin

2. What is the slope of the line y = mx + c?
   - m
   - 1/m
   - 0
   - c

3. What is the equation of the line with a slope of 2 and a y-intercept of 3?
   - y = 2x + 3
   - y = 2x - 3
   - y = x + 3
   - y = x - 3

4. If the slope of a line is 3, what is the rate of change?
   - 3
   - 1/3
   - 1/3
   - 3/1

5. What is the equation of the line that passes through the points (1, 2) and (3, 6)?
   - y = 2x
   - y = x + 1
   - y = 4x - 2
   - y = 2x + 1

6. What is the x-intercept of the line y = 2x + 3?
   - 3
   - 1/2
   - -1/2
   - -3

7. What is the y-intercept of the line y = 2x + 3?
   - 3
   - 1/2
   - -1/2
   - -3

8. What is the equation of the line that is parallel to the line y = 2x + 3 and passes through the point (1, 5)?
   - y = 2x + 1
   - y = 2x + 5
   - y = 2x - 1
   - y = 2x - 5

9. What is the equation of the line that is perpendicular to the line y = 2x + 3 and passes through the point (1, 5)?
   - y = -2x + 1
   - y = -2x + 5
   - y = -2x - 1
   - y = -2x - 5

10. What is the unit rate of the line y = 2x + 3?
   - 2
   - 1
   - 3
   - 4