

## HOMEWORK 1 - MATH 111

DUE DATE: Wednesday, September 11

INSTRUCTOR: George Voutsadakis

Read each problem very carefully before starting to solve it. Each question is worth 1 point. It is necessary to show your work. Correct answers without explanations are worth 0 points.

GOOD LUCK!!

1. Sketch the graph of  $y = x + 1$ .
2. Find the  $x$ - and  $y$ -intercepts of the graph in 1.
3. Sketch the graph of  $y = -2x - 1$ .
4. Find the  $x$ - and  $y$ -intercepts of the graph in 3.
5. The slope of the line passing through the origin and the point  $(3, 1)$  is

$$(a) \quad -\frac{1}{3} \quad (b) \quad 3 \quad (c) \quad -\frac{1}{2} \quad (d) \quad \frac{1}{3}$$

6. The equation of the line having slope  $m = 2$  and  $y$ -intercept  $b = 1$  is

$$(a) \quad y = -2x + 1 \quad (b) \quad y = x + 2 \quad (c) \quad y = 2x + 1 \quad (d) \quad y = \frac{1}{2}x - 1$$

7. The equation of the line that is parallel to  $y = 3x + 2$  and goes through the point  $(2, 7)$  is

$$(a) \quad y = -\frac{1}{3}x - 1 \quad (b) \quad y = 3x + 1 \quad (c) \quad y = -3x + 1 \quad (d) \quad y = 3x - 1$$

8. The equation of the line that has slope  $m = 2$  and goes through the point  $(2, 3)$  is

$$(a) \quad y = -2x - 1 \quad (b) \quad y = -2x + 1 \quad (c) \quad y = 2x + 1 \quad (d) \quad y = 2x - 1$$