HOMEWORK 2 - MATH 111

DUE DATE: Wednesday, September 18
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. The point of intersection of $y = x + 1$ and $y = -\frac{1}{3}x + 2$ is

$$(a) \quad (3,4) \quad (b) \quad (\frac{3}{4}, \frac{4}{7}) \quad (c) \quad (\frac{3}{4}, \frac{7}{4}) \quad (d) \quad (\frac{7}{4}, \frac{3}{4})$$

2. The sales of a company are approximated by a linear equation. If the sales were \$ 200,000 in 1985 and \$ 600,000 in 1988, then the amount of sales in 1991 is

$$(a) \quad \$400,000 \quad (b) \quad \$1,000,000 \quad (c) \quad \$800,000 \quad (d) \quad \$1,200,000$$

3. The solutions of $(x - 7)(3x + 5) = 0$ are

$$(a) \quad 7, 3 \quad (b) \quad 5, 7 \quad (c) \quad -7, \frac{5}{3} \quad (d) \quad 7, -\frac{5}{3}$$

4. The solutions of $x^2 = 9$ are

$$(a) \quad 1, 3 \quad (b) \quad \frac{1}{3}, -\frac{1}{3} \quad (c) \quad 3, -3 \quad (d) \quad 8, 1$$

5. The solutions of $x^2 - 3x - 10 = 0$ are

$$(a) \quad -2, 5 \quad (b) \quad 2, -5 \quad (c) \quad 2, 5 \quad (d) \quad -2, -5$$

6. The solution of $4x + 3 \leq 12$ is

$$(a) \quad x \leq \frac{9}{4} \quad (b) \quad x \leq 12 \quad (c) \quad x \geq 4 \quad (d) \quad x \geq -\frac{9}{4}$$

7. The solution of $x + 4(x + 1) > 5(2 - x) + x$ is

$$(a) \quad x \leq \frac{1}{3} \quad (b) \quad x > \frac{2}{3} \quad (c) \quad x < \frac{3}{2} \quad (d) \quad x \geq \frac{1}{3}$$

8. The solution of $|x + \frac{2}{5}| + 1 < 3$ is

$$(a) \quad -\frac{12}{5} < x \quad (b) \quad \frac{12}{5} < x < \frac{18}{5} \quad (c) \quad x < \frac{8}{5} \quad (d) \quad -\frac{12}{5} < x < \frac{8}{5}$$