

King Fahd University of Petroleum & Minerals
Faculty of Science, Math P-Y
Math 001 Quiz # 7

Ahmad Alzoubi

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Name:

Section #:

ST.ID #:

1. Solve the following inequalities:

a) $|2 - 3x| \geq 7$

b) $\frac{3x+4}{x+1} < 2$

c) $3|4x-3|+2 \leq 5$

d) $x^2 - 3x \geq 28$

$$e) |2x - 5| \leq 0$$

$$f) |3x + 3| \geq -20$$

$$g) \frac{x^2 + 10x + 25}{x + 1} \geq 0$$

2. Find the values of k in interval notation such that the equation $2x^2 + kx + 7 = 0$ has at least one real solution.

3. Use interval notation to express the solution set of the inequality $2 < |x - 6| \leq 4$.

4. Solve $\sqrt{3x - 5} - \sqrt{x + 2} = 1$