

Algebra 3 Assignment # 10

Use quadratic formula to solve:

(1) $3x^2 + 7x + 2 = 0$

(2) $-x^2 + 6x - 14 = 0$

(3) $3x + 1 = 2x^2$

Use the discriminant to determine how many x-intercepts: 1, 2, or no real ones.

(4) $x^2 - 8x + 16 = 0$

(5) $x^2 + 3x - 1 = 0$

Solve each inequality

(6) $x^2 - 2x - 3 < 0$

(7) $x^2 + 3x - 10 \leq 0$

Solve for x:

(8) $2x^4 - 13x^2 - 7 = 0$

Answers:

1. $x = -2, -1/3$

2. $x = 3 \pm i\sqrt{5}$

3. $x = \frac{3 \pm \sqrt{17}}{4}$

4. 1

5. 2

6. $-1 < x < 3$

7. $-5 \leq x \leq 2$

8. $x = \pm \frac{i\sqrt{2}}{2}$ $x = \pm \sqrt{7}$