

Part 1 Use the indicated method to solve. Show all work/thinking. NO DECIMALS

1. Use factoring to solve.

a. $x^2 + 7x + 10 = 0$

b. $3x^2 + x - 2 = 0$

2. Use square roots to solve.

a. $x^2 - 24 = 0$

b. $9x^2 - 11 = 14$

3. Use completing the square to solve.

a. $x^2 + 14x = 15$

b. $x^2 - 6x - 7 = 0$

4. Use the quadratic formula to solve.

a. $x^2 - 5x + 3 = 0$

b. $3x^2 - 4x - 5 = 0$

Part 2 Complex Numbers

5. Add or subtract

a. $(8 + 5i) + (4 - 3i)$

b. $(9 + 2i) - (3 - 4i)$

6. Find the product

a. $5i(3 - 2i)$

b. $(6 - 3i)(2 + i)$

7. Solve the equation.

$x^2 - 4x + 8 = 0$

8. Find the zeros of the function.

$g(x) = 8x^2 + 4x + 5$