

**New Jersey City University**  
**Intermediate Algebra**  
**Peer-Led Team Learning Workshop 12A**  
**Quadratic Equations and Applications**

**Section 8.4**

- 1) A rectangular floor is 3 meters longer than twice its width.
  - (A) Find a function A that models the area of the floor.
  - (B) If the floor has a total square area of  $27 \text{ m}^2$ , then what are the dimensions of the floor?

**Section 8.3**

- 2) The fourth power of a number is one-hundred-fourteen less than twenty-five times the square of the number. Find all numbers that will satisfy the given conditions.

**Section 8.3**

- 3) Solve for real roots:  $x^{2/3} + 2x^{1/3} - 8 = 0$