

Fourth Quiz
October 1, 2009

Directions: This quiz is due Tuesday October 5, at 10:00 AM.

1. Simplify each of the following expressions:

(a) $\sqrt{75x^5y^7z^8}$

(b) $\sqrt{\frac{75x^2y^5}{64z^8}}$

(c) $\sqrt{27} - 5\sqrt{12} + 7\sqrt{3}$

(d) $(2 + \sqrt{6})(\sqrt{2} - \sqrt{15})$

2. Evaluate $x^2 - 4x$ when $x = 2 - 3\sqrt{3}$.

3. Rationalize the denominator $\frac{\sqrt{3} - 2\sqrt{5}}{\sqrt{2} + \sqrt{3}}$

4. Expand the product: $(x - 1 + \sqrt{2})(x - 1 - \sqrt{2})$