

Elementary Algebra Quiz

Name _____

Professor _____

Part I. Perform the following arithmetic computations, expressing your answer in canonical form.

1. $100 \times (-10) \div 10$.

2. $(5^{12-8} - 2^{2^2})^3$.

3. $\frac{\frac{1}{3} + \frac{2}{5}}{\frac{3}{8}}$.

4. $\sqrt{8} - 2^{1/2} + \sqrt[4]{16}$.

Part II. Perform the following algebraic computations, expressing your answer in canonical form.

5. Multiply and collect like terms: $(a + b + c)(a^2 + b^2 + c^2 - ab - bc - ca)$.

6. Perform the division: $\frac{a^3 + b^3 + c^3 - 3abc}{a + b + c}$.