

Name:

QUIZ – MATH GRADE 11

Calculate/Simplify **use fractions if possible**

1. (10%) $\sqrt{0.0016} =$

3. (5%) $\sqrt[3]{a} \cdot \sqrt[3]{a} \cdot \sqrt[3]{a} =$

2. (10%) $\sqrt{75} + \sqrt{27} - \sqrt{300} =$

4. (5%) $\sqrt{x} + \sqrt{x} + \sqrt{x} =$

5. (10%) Convert $1.7777\dots$ to a fraction and find its square root.

6. (5%) $\sqrt{98} - \sqrt{50} =$

7. (5%) $\frac{\sqrt{200}}{\sqrt{147}} =$

8. (10%) Rationalize the denominator: $\frac{5}{2-3\sqrt{7}}$

9. (5%) Rationalize the numerator: $\frac{5\sqrt{5}}{2+\sqrt{2}}$

10. (25%) Given the numbers: 180 and 300.

- a. (5%) Write their prime factorization.
- b. (10%) Find their LCM
- c. (10%) Find their GCD

11. (10%) Given the numbers: $A = a^2b$ and $B = ab^2c$ where a, b and c are prime numbers.

- a. (5%) Find their LCM in terms of a, b and c.
- b. (5%) Find their GCD in terms of a, b and c.