

Math Study Guide

1. Determine the place of the decimal digits in the following number: 0.37

2. Which equation shows the associative property of multiplication?

$$(q \cdot r) \cdot s = q \cdot (r \cdot s)$$

$$q = q \cdot 1$$

$$r \cdot q = q \cdot r$$

$$q \cdot s - r \cdot s = (q - r) \cdot s$$

3 Simplify

$$30 \div 5 \times 2 + 1$$

4. What is the Least Common Multiple (LCM) of 24 and 36?

5. What is the least common denominator (lcd) of $\frac{1}{6}$ and $\frac{7}{15}$?

6. Add the mixed numbers

$$4\frac{1}{3} + 3\frac{2}{5} = ?$$

7. Subtract the mixed numbers

$$4\frac{1}{3} - 3\frac{3}{5} = ?$$

8. What is 15% of 80?

9. Ann works in a supermarket for \$10.00 per hour. If her pay is increased to \$12.00, then what is her percent increase in pay?

10. In a video store, a DVD that sells for \$15 is marked "10% off." What is the discount? What is the sale price of the DVD?

11. A new computer costs \$600 plus 7% sales tax. How much is the cost of the computer with added tax?

12. Find the volume of sphere with radius of 5. Round to nearest whole number.

$$V = \frac{4}{3}\pi r^3$$

13. What is the probability of flipping a fair coin 3 times and getting all heads?

14. Solve for x.

$$4 - (2x - 1) = -11$$

15. Find the coordinates of the vertex of $y = -3x^2 - 6x + 2$.