

ONE PAGE SUMMARY

Competitive Exams > Central Government Exams > Railway Exams

Mathematics and Arithmetic

Master Mathematics for Railway Exams with Confidence!

DEFINITION

Mathematics and Arithmetic in Railway Exams test your numerical ability and problem-solving skills. These topics include basic calculations, ratios, percentages, and more.

KEY CONCEPTS

Basic Arithmetic

Includes addition, subtraction, multiplication, and division, forming the foundation for all math problems.

Ratios and Proportions

Used to compare quantities and solve problems involving relative sizes and relationships.

Percentages

Represents a fraction of 100, essential for calculating discounts, interest, and comparisons.

Averages

The mean, median, and mode help summarize data sets and are frequently tested.

Time and Work

Involves calculating how long tasks take based on individual or combined work rates.

EXAMPLES

- If a train travels 60 km in 1 hour, how far will it go in 3 hours?
- Calculate 25% of 200.
- If 5 workers can complete a task in 10 days, how long will 10 workers take?

MEMORY TIPS

- ★ Remember 'PEMDAS' for order of operations: Parentheses, Exponents, Multiplication, Division, Addition, Subtraction.
- ★ Use 'All Students Take Calculus' to recall which trigonometric functions are positive in each quadrant.
- ★ For percentages, think of 'out of 100' to simplify calculations.

COMMON MISTAKES

- ✗ Misreading the question or ignoring key details.
- ✗ Forgetting to convert units when necessary.
- ✗ Rushing through calculations, leading to simple arithmetic errors.

QUICK RECAP

Focus on mastering basic arithmetic, ratios, and percentages for Railway Exams. Practice regularly to improve speed and accuracy, and remember to read questions carefully.