



**Hello! Young Learners** 

# Get ready to fall in love with Math

**Accredited by** 



Backed by









### **About Codingal**

### Our Mission: To inspire kids to fall in love with Math

Codingal offers online math classes for K-12 students, where kids and teens learn math concepts through live, interactive sessions with expert instructors. Our mission is to build the world's best and most loved online math learning platform for kids and teens, blending traditional teaching with innovative techniques and tools.

All our instructors have strong backgrounds in math and engineering, and they are rigorously vetted and trained. Each student receives a personalized learning path with individual attention in 1:1 private classes. Students learn math through real-life applications, hands-on problem-solving, and interactive activities that make learning fun and exciting.

Kids find Codingal's math classes highly engaging and inspiring. They have rated teachers at 4.9 out of 5. Curriculum content is rated at 4.8 out of 5.

Codingal is on a mission to inspire kids to fall in love with math and provide the right education that empowers them to solve real-world problems, think critically, and build a strong foundation for the future as innovators, engineers, scientists, and entrepreneurs.



# **8** Learning Outcomes

#### **Ratios & Proportional Relationships**

Compute unit rates for ratios of fractions and apply them to real-world problems involving lengths, areas, and quantities. Recognize proportional relationships through tables, graphs, and equations, identifying the constant of proportionality. Solve financial problems involving interest, tax, markups, discounts, and fees using proportional reasoning.

#### **Rational Numbers & Operations**

Define and locate rational numbers on the number line, convert between fractions, decimals, and percentages, and compare their magnitudes. Add, subtract, multiply, and divide rational numbers, applying them to budgeting, temperature changes, and cost calculations. Solve multistep real-world problems involving all four operations with rational numbers.

#### **Algebraic Expressions & Equations**

Simplify algebraic expressions using properties of operations. Solve linear equations and inequalities through simplification and reasoning. Explore scale drawings and apply proportional reasoning to architecture and engineering problems.

#### **Geometry & Measurement**

Classify, measure, and construct angles and triangles using properties and geometric tools. Calculate area for polygons and surface area and volume for 3D shapes, applying formulas to real-world scenarios.

#### Data & Probability

Analyze data using mean, median, mode, and range. Compare datasets and draw inferences from statistical measures. Explore probability concepts, calculate probabilities of simple and compound events, and apply the fundamental counting principle to real-world decision-making.

Topics	Module	Lesson Titles
01. Ratio and Proportions	Unit Rates	Computing Unit Rates for Fractions
	Proportional Relationships	Recognizing and Representing Proportional Relationships
		Introduction to Proportional Relationships
		Understanding and Representing Proportional Relationships
		Representing Proportional Relationships Using Equations
2.2		Interpreting Points on the Graph of a Proportional Relationship
2:3	Ratios and Proportions	Introduction to Ratios and Proportions
	Financial Proportions	Solving Simple Interest Problems Using Proportional Relationships
		Calculating Tax, Markups, and Markdown Using Proportional Relationships
		Solving Gratuities and Commissions Problems
		Understanding Fees and Percent Problems
	Percent Error	Calculating Percent Error Using Proportions
	Review and Application	Review and Application of Proportional Relationships in Multistep Problems
	Assessment and Reflection	Assessment and Reflection
		Introduction to Rational Numbers
02. Number		Rational Numbers on the Number Line
System	Introduction to Rational Numbers	Representing Rational Numbers in Fraction, Decimal, and Percent Form
		Comparing and Ordering Rational Numbers
	Addition & Subtraction	Introduction to Adding and Subtracting Rational Numbers
		Visualizing Addition and Subtraction on the Number Line
		Real-World Applications of Addition and Subtraction of Rational Numbers

Topics	Module	Lesson Titles
		Introduction to Multiplying and Dividing Rational Numbers
		Multiplying Rational Numbers
	Multiplication & Division  Properties of Operations	Dividing Rational Numbers
		Real-World Applications of Multiplying and Dividing Rational Numbers
		Exploring the Commutative, Associative, and Distributive Properties
		Applying Properties of Operations in Problem Solving
	Advanced Applications	Solving Complex Problems Involving Rational Numbers
		Real-World Applications of Rational Numbers
	Decimal Representation	Terminating and Repeating Decimals
		Converting Rational Numbers to Decimals using Long Division
		Analyzing Decimal Forms of Rational Numbers
	Review and Reinforcement	Review and Practice: Rational Numbers
	Expressions & Equations	Introduction to Properties of Operations
		Applying Properties to Add and Subtract Linear Expressions
02. Expressions & Equations		Factoring and Expanding Linear Expressions
a Equations		Rewriting Expressions in Different Forms
$m = \frac{y_2 - y_1}{y_2 - x_1}$		Solving Multi-Step Problems Involving Rational Numbers
		Using Variables to Represent Quantities
		Solving Equations of the Form px + q = r
		Solving Inequalities of the Form px + q > r or px + q < r
		Review and Practice

Topics	Module	Lesson Titles
03. Geometry	Scale Drawings	Introduction to Scale Drawings
		Solving Problems with Scale Drawings
		Creating Scale Drawings
	Angles and Triangles	Understanding Angles
		Measuring and Constructing Angles
		Angle Relationships
		Solving for Missing Angles in Triangles
		Classifying Triangles
		Constructing Triangles
	Area of Polygons	Area of Trapezium
		Area of Parallelogram
		Area of Triangles and Quadrilaterals
		Area of Polygons
	Area, Surface Area, and Volume	Surface Area of 3D Shapes
		Volume of Prisms
		Solving Real-World Problems with Volume
04. Statistics	Measures of Center	Introduction to Measures of Center
		Calculating Mean, Median, and Mode
		Introduction to Range and Variability
	Measures of Variability	Interpreting Data Using Variability



Topics	Module	Lesson Titles
		Surface Area of 3D Shapes
	Area, Surface Area, and Volume	Volume of Prisms
		Solving Real-World Problems with Volume
		Understanding Probability
05. Probability	Probability of Simple Events	Experimental vs Theoretical Probability
		Probability on Number Lines
		Introduction to Compound Probability
	Compound Probability (Dependent Events)	Calculating Probability of Independent Events
		Dependent Events and Conditional Probability
	Real-World Applications	Probability in Real-Life Scenarios

### Top 10 benefits of learning at Codingal



#### 1. Regular PTM

Great opportunity for parents and teachers to open two-way communication and to share insights and information for the holistic development of a child.



#### 2. Regular doubt session

After every module solve all your queries in this personalized session. The toughest problems addressed – concepts revised and doubts cleared!



#### 3. Engaging Quizzes & Worksheets

After each class, students get a quiz and worksheets to reinforce learning. These engaging, gamified exercises ensure their understanding is checked and make practice exciting.



#### 4. Global Curriculum Expertise

Codingal offers courses tailored to major international and national curricula, including US Common Core (USCC), Australian Curriculum, IB, British Curriculum, IGCSE, CBSE, ICSE, and more. Our expert teachers specialize in these curricula.



#### 5. Course Customization

Whether before starting or anytime during your child's learning journey, you can get a personalized course tailored to align with their school curriculum, exams, Olympiad preparation, or competition needs.

# Top 10 benefits of learning at Codingal



#### 6. Live personalized classes

Understand concepts faster with personal attention from teachers. Learn coding from highly qualified teachers trained to make learning effective and impactful.



#### 7. Lifetime Access to Class Recordings & Notes

Forgot what was taught in the last class? No worries. Watch the recorded class video anytime to refresh your memory. Get lifetime access to our exclusive learning content including interactive worksheets, videos, and other resources.



#### 8. Gamified learning

Codingal makes learning fun with gamification. Students can take quizzes or complete projects to earn points, badges, and rewards.



#### 9. Thrilling competitions

Regular competitions are conducted to encourage students to showcase their skills and develop their ideas.



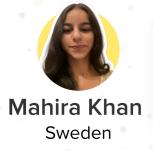
#### 10. Learning Certificates

Show the world what you can do with a certificate for every amazing skill you master.

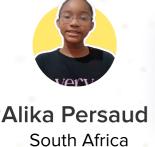
### **Students love Codingal**



Math was tough for me but now it has become easy and interesting because of Codingal.



My problem solving skills have improved drastically because of Codingal!



Because of Codingal Math, I have massive improvement in my grades!



Codingal has made me excellent in math







# Codingal empowers kids to become innovators of the future

### Why this curriculum?



Accredited by STEM.org

Rated 4.5 out of 5 by students and parents on Trustpilot
Based on BIDE (Broad, Inspiring, Deep and Efficient) model
Focus on STEAM (Science, Technology, Engineering, Arts,
Math) subjects

Enhances cognitive, logical, and computational skills Makes learning highly effective, interactive, and fun

### Foundation of Codingal's curriculum

#### **BLOOM**

Bloom's Taxonomy is a standard guideline for K-12 content development, which includes 6 stages of learning: Remember, understand, apply, analyze, evaluate and create.

#### **BIDE**

The BIDE (Broad, Inspiring, Deep and Efficient) model has been developed by Codingal inhouse to ensure that our curriculum caters to the unique learning style of every child.

#### **STEAM**

STEAM is an approach to learning that uses Science, Technology,
Engineering, the Arts and
Mathematics as access points for guiding student inquiry, dialogue, and critical thinking.

## **Math - Foundation for the Future**



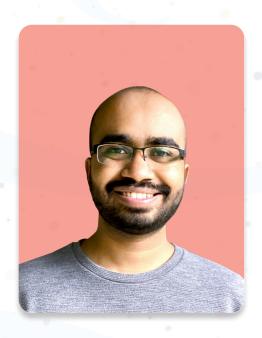
"Math is the foundation of all sciences and a universal language. It's the key to unlocking solutions in business and innovation."

- Elon Musk

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"Pure mathematics is, in its way, the poetry of logical ideas"
- Albert Einstein

# A note from Codingal Founders



Mathematics is the language of possibility, unlocking the door to a world of innovation discovery, and endless potential. Our teachers open the doors for kids to explore the potential and beauty of Math.

#### Vivek Prakash

Co-founder & CEO B.Tech & M.Tech, IIT Roorkee



in LinkedIn



Mathematics is not only about numbers, equations, and algorithms; it is about understanding and exploring the patterns that shape our world.

#### **Satyam Baranwal**

Co-founder & COO B.Tech, IIT Dhanbad



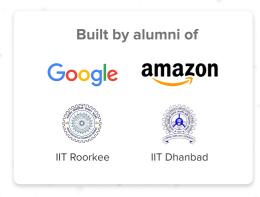
in LinkedIn

### Make your kid's math journey fun and inspiring

- Is your child ready for the future?
  - Visit www.codingal.com

Try a free lesson!

# **Thank You**







Got questions? Contact us anytime.

Send us a message support@codingal.com