



Codingal



Grade 7

Hello ! Young Learners

Get ready to fall in love with Math

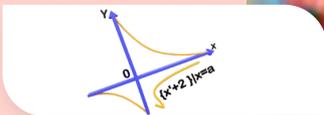
Accredited by



Excellent by



Backed by





About Codingal

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.





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.



Math Curriculum (Grade 7)

Topics	Module	Lesson Titles
<p>01. Ratio and Proportions</p> 	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
		Interpreting Points on the Graph of a Proportional Relationship
		Ratios and Proportions
	Financial Proportions	Test - The Ocean Explorers
		Solving Simple Interest Problems Using Proportional Relationships
		Introduction to Compound Interest
		Profit and Loss
		Profit and Loss Percentage
		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
	Test - The Autumn Champions	

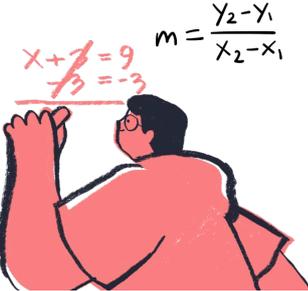


Math Curriculum (Grade 7)

Topics	Module	Lesson Titles
02. Number System 	Introduction to Rational Numbers	Introduction to Rational Numbers
	Addition & Subtraction	Rational Numbers on the Number Line
		Representing Rational Numbers in Fraction, Decimal, and Percent Form
		Comparing and Ordering Rational Numbers
		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
		Test - The Winter Holiday
	Multiplication & Division	Multiplying Rational Numbers
		Dividing Rational Numbers
		Real-World Applications of Multiplying and Dividing Rational Numbers
	Properties of Operations	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		
Test - The Time Travel		



Math Curriculum (Grade 7)

Topics	Module	Lesson Titles
02. Expressions & Equations 	Expressions & Equations	Introduction to Properties of Operations
		Applying Properties to Add and Subtract Linear Expressions
		Factoring and Expanding Linear Expressions
		Rewriting Expressions in Different Forms
		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 $px + q < r$
		Test - The Festival Fun
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 Circles	Area of circles
		Test - The Rainbow Data Explorer



Math Curriculum (Grade 7)

Topics	Module	Lesson Titles
	Area of Polygons	Area of Trapezium
		Area of Parallelogram
		Area of Triangles and Quadrilaterals
		Area of Polygons
		Types of 2D shapes formed on slicing various 3D shapes
	Area, Surface Area, and Volume	Surface Area of 3D Shapes
		Volume of Prisms
		Solving Real-World Problems with Volume
		Test - The Party Planner
	04. Statistics	Measures of Center
Calculating Mean, Median, and Mode		
Measures of Variability		Introduction to Range and Variability
		Interpreting Data Using Variability
Comparative Inferences		Introduction to Comparative Inferences
		Making Inferences from Random Samples
		Analyzing Random vs Biased Samples
		Test - The Mountain Expedition



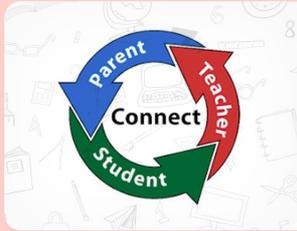


Math Curriculum (Grade 7)

Topics	Module	Lesson Titles
05. Probability 	Probability of Simple Events	Understanding Probability
		Experimental vs Theoretical Probability
		Probability on Number Lines
	Compound Probability (Dependent Events)	Introduction to Compound Probability
		Calculating Probability of Independent Events
		Dependent Events and Conditional Probability
	Real-World Applications	Probability in Real-Life Scenarios
		Test - The Picnic Planner



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



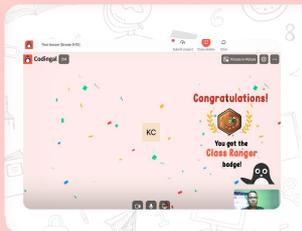
6. Live personalized classes

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



Mohau Motang
South Africa

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



Mahira Khan
Sweden

“ My problem solving skills have improved drastically because of Codingal!



Alika Persaud
South Africa

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



Zunaira Rizwan
Pakistan

“ Codingal has made me excellent in math



TrustScore **4.8** | **425** reviews



4.6 out of 5



5 out of 5



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 in-house 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

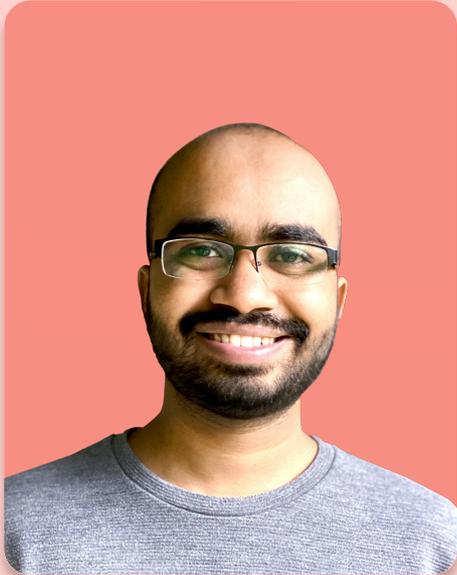


"Pure mathematics is, in its way, the poetry of logical ideas"

- 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

 [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

 [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

Built by alumni of

Google amazon



IIT Roorkee



IIT Dhanbad

In partnership with



IIT Bombay



IIT Guwahati



Hewlett Packard Enterprise



BITS Pilani

Accredited by STEM.org



Backed by



Combinator



REBRIGHT PARTNERS

Got questions?
Contact us
anytime.

Send us a message



support@codingal.com