



marshall
cavendish
education

presents

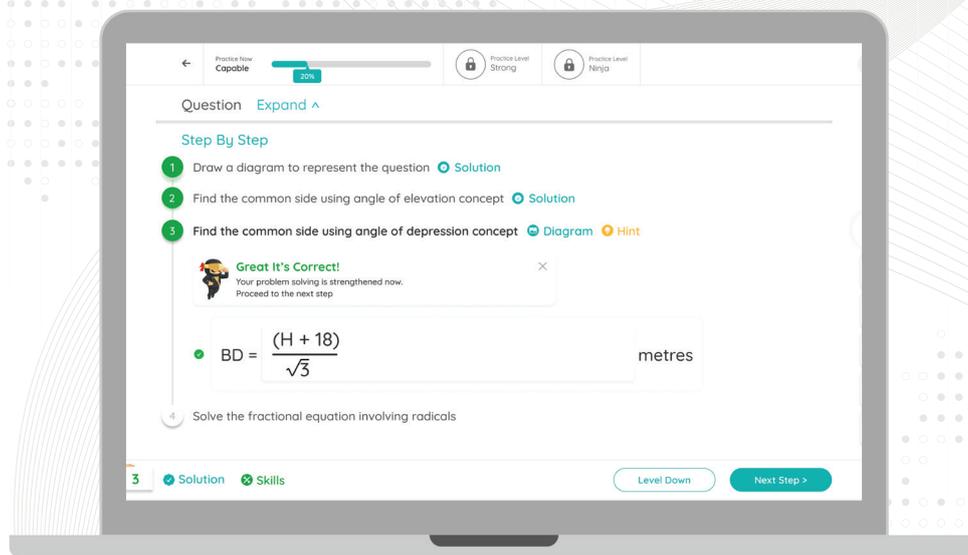


CEREBRY

Your AI Co-Teacher/
Your path to STEM Excellence

About Cerebry

Cerebry is a comprehensive post-class practice and assessment solution for STEM subjects that caters to various curriculums across the world. The platform has been widely adopted in schools in the United States, United Arab Emirates, India, Philippines, Singapore, and Indonesia. Whether U.S. Common Core, IGCSE, CBSE, DEPED, or GCE O-Level, Cerebry's AI aligns with any curriculum by first shaping the engine around the content provided, then creating a rich variety of problem sets through the AI's question generation capabilities. Cerebry's AI can also be customised to various teaching styles and even include the creation of dynamic images and graphs.



- ✓ Enhance student engagement and performance in various subjects across all grade levels.
- ✓ Implement strategies for more personalised and effective test preparation services for students.
- ✓ Optimise the learning experience for a diverse student base.

Maximise student engagement across a breadth of subjects on Cerebry, from Science and Maths, to History, Geography, and English! Cerebry offers a wide array of question types, ensuring students receive comprehensive mastery, even in nuanced areas.

These include:

Question

Fill in the blanks.

5	6	.	3	4	2
---	---	---	---	---	---

(a) The digit ___ is in the thousandths place.
 (b) The digit ___ is in the tenths place.
 (c) The digit 4 is in the ___ place.

Subpart question

Question

Look at the pictures, which one of them does not represent a means of infectious disease transmission?

Answer





Open-ended/
reasoning

Question

If the radius of the base of the cylinder thus obtained

Answer

- 1 : 2
- 2 : 1
- 1 : 4
- 4 : 1

Check Answer

Objective/MCQ

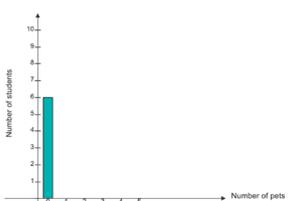
Proof-based
questions

Question

The table below shows the number of pets kept by each of 35 students.

Pets	5	4	3	2	1	0
Students	7	y	4	x	6	6

(a) Given that the percentage of students who kept 2 pets each is 20%, find the values of x and y . Round off the values of x and y upto the nearest integer.
 (b) Complete the bar graph.



Arrangement
of steps

Assertion &
reasoning based

Why make Cerebry your go-to Teaching Assistant?



Generates differentiated problems to suit every learners' needs



Instantly breaks complex problems into steps for clearer understanding



Step-by-step auto-grading



Resolves learners' doubts in real-time



Offers dynamic constructive feedback and guided self-reflection



Transforms learning into an exciting team adventure

Generate differentiated problems to suit every learner's needs

Cerebry focuses on tailoring learning through one unique question at a time. Cerebry's AI generates unlimited problem variations to ensure personalised questions for each student, offering flexibility in their learning as well as preventing plagiarism. Educators have the option to either generate detailed step-by-step solutions or to train the AI to learn tricks. Discover the effectiveness of AI in scaffolding questions to promote procedural understanding with Cerebry.

Carlito Louis A. Easy 100% / Medium 100% / Hard 100%

Class : Collins Factoring | Factorization of Polynomial with Co...

Session Overview Question Practiced **Currently Solving**

✔ Attempt 1 ✔ Attempt 2 ← | →

Question v

Factorise $64x^3y - y$.

Correct Answer v

$$\begin{aligned}
 64x^3y - y &= (4x)^3y - y \\
 &= y((4x)^3 - 1^3) \quad [\because a^3 - b^3 = (a - b)(a^2 + ab + b^2)] \\
 &= y(4x - 1)((4x)^2 + 4x + 1)
 \end{aligned}$$

Submitted Answer

$$y(4x - 1)(16x^2 + 4x + 1)$$

Enzo Adrian O. Easy 100% / Medium 100% / Hard 100%

Class : Collins Factoring | Factorization of Polynomial with Co...

Session Overview Question Practiced **Currently Solving**

✘ Attempt 1 ✔ Attempt 2 ← | →

Question v

Factorise $x^3y - 8y$.

Correct Answer v

$$\begin{aligned}
 x^3y - 8y &= x^3y - 2^3y \\
 &= y(x^3 - 2^3) \quad [\because a^3 - b^3 = (a - b)(a^2 + ab + b^2)] \\
 &= y(x - 2)(x^2 + 2x + 4)
 \end{aligned}$$

Submitted Answer

$$y(x - 2)(x^2 + 2x + 4)$$

Instantly breaks complex problems into steps for clearer understanding

Step-by-step question breakdowns are sets of AI-generated guided instructions that provide a clear and organised approach to solving complex problems, enhancing students' understanding of underlying concepts. Students need to unlock each step and navigate through problem-solving processes.

The screenshots illustrate the CEREBRY interface for solving a problem. The problem involves finding a common side using angle of elevation and angle of depression concepts.

Screenshot 1 (Top Left): Shows the first step: "Draw a diagram to represent the question". The second step is "Find the common side using angle of elevation concept". The user has entered $H = 2$ and $H = 4$. A red error message is shown for the second step.

Screenshot 2 (Top Right): Shows the second step: "Find the common side using angle of elevation concept". The user has entered $H = 3$ and $H = 6$. A green success message is shown for the second step.

Screenshot 3 (Bottom Left): Shows the first step: "Draw a diagram to represent the question". The second, third, and fourth steps are locked.

Screenshot 4 (Bottom Right): Shows the second step: "Find the common side using angle of elevation concept". The user has entered "Enter your answer here..." for both $H =$ fields. A green success message is shown for the second step.

Step-by-step auto grading

Cerebry's AI grades students' step-by-step workings and provides scaffolded instructional nudges when students are unsure of how to answer. Additionally, it detects and flags errors in their workings.

Question [Collapse](#) ▲
Solve the equation $2(8x - 3) = 4x + 6$

Answer

1 Partial Marks Earned

- $(x - 4)(x - 4) = 16$
- $x^2 + 16 + 8x$
Incorrect... It's an Error
You're facing a challenge, and that's where the real learning happens.
 $x^2 + 16 + 8x$
Wrong, error in applying the balance method
- Misconception**
Terms are not added or subtracted correctly on both sides of the equation, leading to an imbalance and an incorrect solution.
- $(x - 4) = \pm 4$
Incorrect!
This step is wrong because of error in the previous step
- $x = 1$
Incorrect!
This step is wrong because of error in the previous step

Clear Next Question

Practice Now Capable 30%

Practice Level Strong Practice Level Ninja

Question [Collapse](#) ▲
Solve the equation $2(8x - 3) = 4x + 6$

Answer

Enter your final answer, or provide your answers in steps. Cerebry is here to assist you.

Enter your answer here...

Check Answer

Practice Now Capable 30%

Practice Level Strong Practice Level Ninja

Question [Collapse](#) ▲
Solve the equation $2(8x - 3) = 4x + 6$

Answer

1 Partial Marks Earned

- $(x - 4)(x - 4) = 16$
- $x^2 + 16 + 8x$

Check Answer

Practice Now Capable 30%

Practice Level Strong Practice Level Ninja

Question [Collapse](#) ▲
Solve the equation $2(8x - 3) = 4x + 6$

Answer

1 Partial Marks Earned

- $(x - 4)(x - 4) = 16$
- $x^2 + 16 + 8x$
Incorrect... It's an Error
You're facing a challenge, and that's where the real learning happens.
 $x^2 + 16 + 8x$
Wrong, error in applying the balance method
- Misconception**
Terms are not added or subtracted correctly on both sides of the equation, leading to an imbalance and an incorrect solution.
- $(x - 4) = \pm 4$

Next Question

Resolve learners' doubts in real-time

Cerebot is Cerebry's own real-time AI tutor for clearing up any doubts students might have. Students can raise any challenges or problems they face when completing assignments with Cerebot and receive immediate feedback to resolve their issues. With the ability to work with images, graphs, and more, this Cerebry AI tutor is the perfect, round-the-clock teaching assistant for time-constrained educators.

Cerebot - Your Tutor — ↗ ✕

Hi, I'm having trouble with a quadratic equation problem. The equation is $2x^2 + 5x + 3 = 0$. Can you help me solve it?

You

Of course, I'd be happy to help you solve the quadratic equation problem. Let's start by looking at the standard form of a quadratic equation, which is $ax^2 + bx + c = 0$. In your case, the equation is $2x^2 + 5x + 3 = 0$. Can you identify the values of a, b, and c in this equation?

Cerebot

Yes, a =, b = 5 and c = 3

You

That's correct, well done! Now that we know the values of a, b, and c, we can use the quadratic formula to find the solutions for x. Do you remember what the quadratic formula is?

Cerebot

Why can't we use the factorization method?

You

Type your question here...  

Offers dynamic constructive feedback and guided self-reflection

Cerebry's AI-powered diagnostics and assessments offer schools an innovative and data-driven approach to student evaluation. The AI-generated adaptive diagnostics reveal students' precise grade levels, allowing educators to effectively tailor their teaching approach. The diagnostics can identify and address students' most pressing misconceptions with ease, so educators can guide them towards a deeper understanding.

The screenshot shows a user interface for a student named Ethel E. The interface is organized into a grid of question difficulty levels. A 'Preview' window is open, showing a question about the area of a shaded triangle on a grid. The triangle has a base of 5 cm and a height of 3 cm.

Topic	Question 1	Question 2	Question 3
Rate	Easy	Medium	Hard
Area Of Triangle	Easy	Medium	Hard
Volume Of Cubes And Cuboids	Easy	Medium	Hard
Angles	Easy	Medium	Hard
Mix Bag	Easy	Easy	Medium

Preview
 Question 3 **Hard**
 What is the area of the shaded triangle? The figure is not drawn to scale.

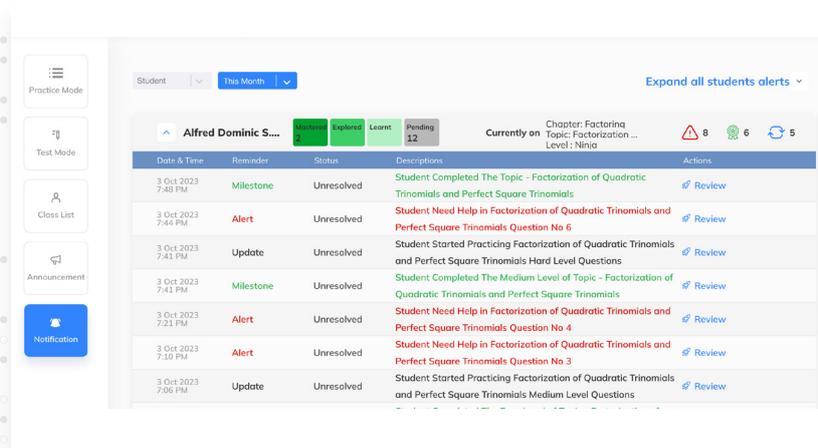
At the click of a button, educators can also generate unique sets of offline examination papers to test students and ensure varied and comprehensive assessments at all levels of learning readiness.

Cerebry's proficiency reporting capabilities also offer learners the path to topic mastery and beyond. While adaptive diagnostics pinpoint learners' precise grade levels, the proficiency reports generated illuminate strong topics and areas for growth, guiding them towards excellence.

The screenshot shows a proficiency report for a student named Chloe Margaret. The report is titled 'Sample Assessment Math' and displays a table of performance metrics across various topics.

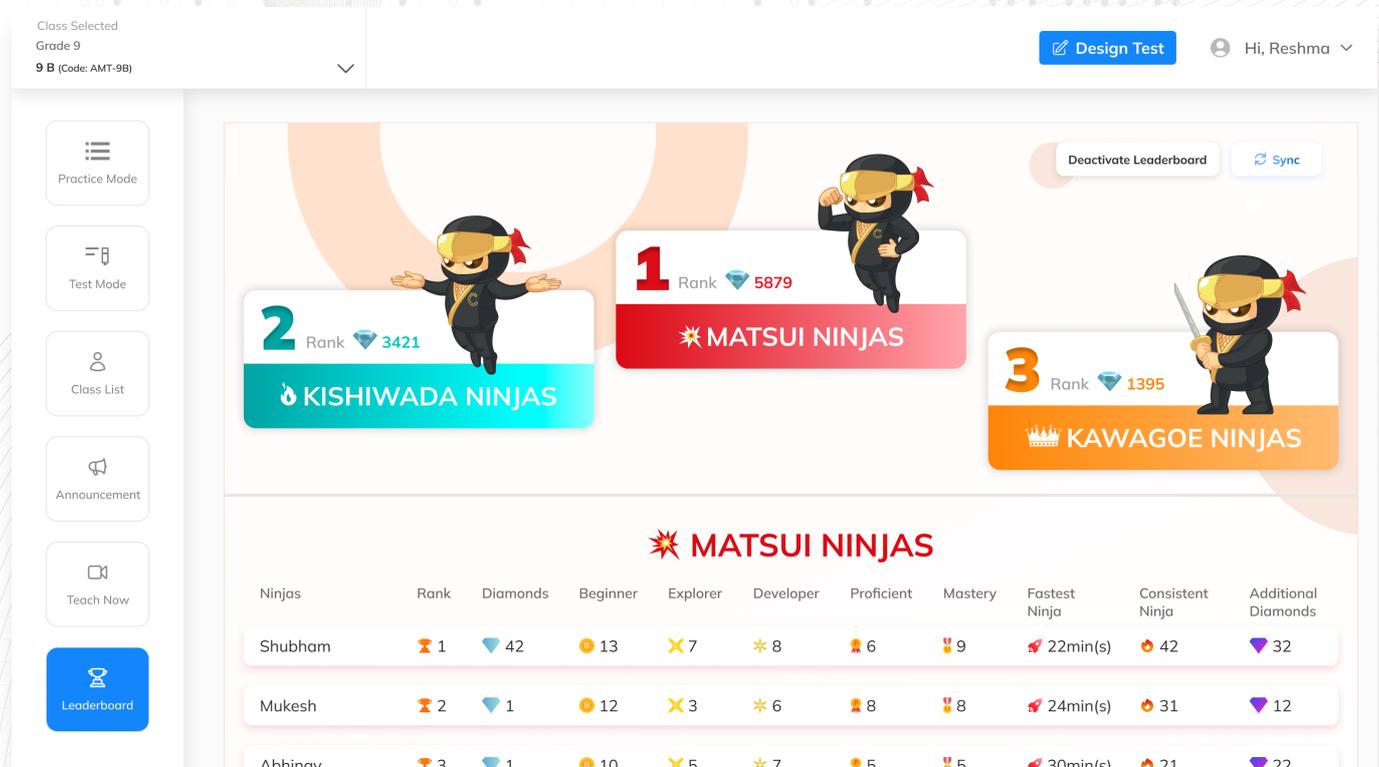
Topic Name	Proficiency	Accuracy	Question Count	Marks	Skills
Surface Areas	13.89%	20.74%	3.77 (E2.22, M1.22, H0.33)	1.11	5
Logical Thinking	18.00%	37.04%	3.55 (E0.89, M1.44, H0.32)	1.44	6
Algebra	37.5%	45.18%	3.78 (E0.78, M2.22, H0.78)	3.00	6
Distance Time And Speed	42.22%	38.89%	2.88 (E0.44, M1.00, H1.44)	2.11	3
Ratio And Proportion	42.86%	49.07%	3.55 (E0.89, M2.33, H0.33)	3.00	5
Solid Figures Sequences	53.33%	55.56%	2.34 (E0.78, M1.00, H0.56)	2.67	3
Statistics	57.78%	59.26%	2.00 (E0.22, M1.00, H0.78)	2.89	3
Rate And Percentage	61.11%	71.3%	3.34 (E0.56, M1.00, H1.78)	4.89	5
Exponents And Integers	66.67%	73.33%	3.56 (E0.67, M1.78, H1.11)	5.33	6
Primes	82.22%	81.48%	2.33 (E0.11, M1.00, H1.22)	4.11	3

Transform learning through timely alerts and data-driven actions with Cerebry's feedback loop. Receive instant notifications when students achieve significant milestones or encounter challenges, ensuring educators stay informed on their learning journey. Accurately identify which topics learners are excelling at and where they may need additional support via regular updates.



Transforms learning into an exciting team adventure

Spark team success with Cerebry's new gamification feature. Students can now join forces, practice together, and compete with other teams, making learning more engaging and fun. This isn't just about points; it's about fostering collaboration, boosting motivation, and transforming learning into an interactive journey.



Cerebry's Anti-Plagiarism Shield for Academic Integrity

At Cerebry, academic integrity is taken very seriously. The platform includes robust anti-plagiarism features designed to deter and reduce the likelihood of plagiarism in practice and assessments.

The screenshot displays the Cerebry interface for a class named 'CPH-11D'. It features a navigation bar with 'Connect Competition' and 'Join New Class' options, and a user profile for 'Hi, Zawa Vara'. Below the navigation, there is a section titled 'Practice Mode' with a message: 'To provide a secure learning environment free from plagiarism and unethical practises, we analyze student IP activity on this platform. This information will be shared with your instructor or teacher'. A table below this message lists student activity logs.

Access Type <small>(Browser, mobile, PDP1, etc.)</small>	Location (IP address)	Date/Time <small>(Displayed in your time zone)</small>	Cerebry Activity
Browser (Chrome) Show details →	India (KL) (103.70.36.120)	10:35 am (0 minutes ago)	Practice
Browser (Chrome) Show details →	India (KL) (103.70.36.120)	10:17 am (18 minutes ago)	Assignment
Browser (Chrome) Show details →	India (KL) (103.70.36.120)	9:51 am (43 minutes ago)	Competition
Browser	India (KL) (2401:4900:615b:87c5:45f:87c5:5ff:f39c:aba8)	8:14 am (1.5 hours ago)	Competition
Mobile	India (KL) (2401:4900:615b:87c5:45f:87c5:5ff:f39c:aba8)	Jul 13 (13 hours ago)	Assignment
Browser	India (KL) (2401:4900:615b:87c5:45f:87c5:5ff:f39c:aba8)	Jul 13 (14 hours ago)	Practice
Browser (Chrome) Show details →	India (KL) (103.70.36.120)	Jul 13 (17 hours ago)	Assignment

About Marshall Cavendish Education

Marshall Cavendish Education (MCE) is a global education solutions provider dedicated to nurturing the joy of learning and preparing students for the future. We believe the best way to do so is by simplifying learning and listening to the needs of schools, teachers, students, and parents.

MCE makes world-class educational content more accessible through a seamless experience that integrates both print and digital resources. We provide holistic and end-to-end solutions customised to the school's requirements, with professional development to help educators implement the curriculum.

We've worked with ministries, policymakers, educators, and parents in over 90 countries, designing education solutions in 14 languages for Pre-K to 12. MCE is the only Asia-based publisher that is an endorsement partner of Cambridge International Education.

www.mceducation.com

