ISolveMath

Maths word problem solving and visualisation

Purvanshi Mehta

Problem

The abstract nature of the subject mathematics makes it the most difficult subject for a majority of the students.

Lack of proper resources to explain concepts and clear doubts of young students.

Struggle of the students increase when **contextualised problems which require reading** are included in the course .

Solution

An **intelligent system** which understands the mathematical language, provides **solutions and explanations**.

System uses deep learning, natural language processing and artificial intelligence techniques techniques to understand and provide solutions.

How it works

A **chatbot** which would ask questions to check if your concepts are clear.

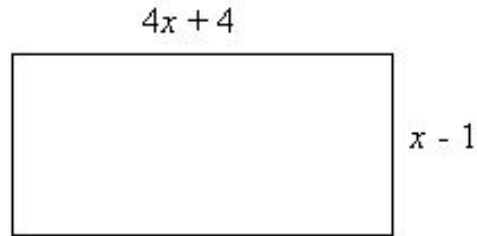Child - Find the centroid of a triangle whose coordinates are X, Y, Z.

ISolveMath - Nice question!! But do you know what a centroid is?

Example

An intelligent **question answering system** which would solve questions by giving explanations through visualisations when a child **posts or uploads any question**.

A rectangle is 4 times as long as it is wide. If the length is increased by 4 inches and the width is decreased by 1 inch, the area will be 60 square inches. What were the dimensions of the original rectangle?

$$4x + 4$$

$$x - 1$$

$$60 = (4x + 4)(x - 1)$$

Example

To check that the child has understood the previous question he asked a **concept validation system** which would post similar question and check if he answers it right.

A rectangle is 4 times as long as it is wide. If the length is increased by 4 inches and the width is decreased by 1 inch, the area will be 60 square inches. What were the dimensions of the original rectangle?

The width of a rectangle is 3 feet less than its length. The perimeter of the rectangle is 110 feet. Find its dimensions.

Competition

Byju's learning app - 10 million

Scholr - 10 thousand

(**Let's math**) Pocket Tutor - 50 thousand

yHomework - 1 million

Socratic - 100 thousand

Brainly Homework Help & Solver - 5 million

Team

Purvanshi Mehta - Research Scholar IIIT, AI, Deeplearning, NLP

Himanshi Mehta - Front End Developer

Alok Singh - Developer (Python) and research NLP

Sarthak Arora - Developer

Thank you