# AI-Generated Questions for HighScore.ai Assignment

Below are questions in the required Question Output Format.

@title Algebra & Geometry Mini Assessment

@description A mini assessment containing two AI-generated math multiple-choice questions similar in style to the base questions. Each question preserves LaTeX where appropriate and follows the requested output format.

@question If $10x - 5 = 5x + 15$, what is the value of x?

@instruction Solve for x and choose the correct answer.

@difficulty easy

@Order 1

@option \(\frac{2}{3}\)

@option \(\frac{3}{2}\)

@@option Correct Answer

@option 4

@option 5

@explanation Subtract 5x from both sides: 5x - 5 = 15 -> 5x = 20 -> x = 4.

@subject Quantitative Math

@unit Algebra

@topic Interpreting Variables

@plusmarks 1

@question A right triangle has legs of length 6 and 8. What is the measure of the hypotenuse?

@instruction Select the exact length.

@difficulty easy

@Order 2

@option 10

@@option Correct Answer

@option 12

@option 14

@explanation Use Pythagorean theorem: hypotenuse = sqrt(6^2 + 8^2) = sqrt(100) = 10.

@subject Quantitative Math

@unit Geometry and Measurement

@topic Right Triangles & Trigonometry

@plusmarks 1