Draw a Large Scalene Triangle on Grid Paper: Plotting from Coordinates and Side Lengths

Original task 1 / independent drawing and calculation

Task 1

On grid paper with one square equal to one unit, plot vertices P(2,2), Q(7,2), and R(5,6). Connect them and determine whether the triangle is scalene. Show your side-length calculations.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw a Large Scalene Triangle on Grid Paper: Plotting from Coordinates and Side Lengths

Original task 2 / independent drawing and calculation

Task 2

Construct a triangle with side lengths 6 units, 5 units, and 4 units on grid paper where one square equals one unit. Draw the 6-unit side horizontally first, then locate the third vertex with a compass. Confirm the triangle is scalene.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw a Large Scalene Triangle on Grid Paper: Plotting from Coordinates and Side Lengths

Original task 3 / independent drawing and calculation

Task 3

A student plots vertices X(0,0), Y(4,0), and Z(2,3) and claims the triangle is scalene. Check the claim by calculating all three side lengths and state whether the claim is correct.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw a Large Scalene Triangle on Grid Paper: Plotting from Coordinates and Side Lengths

Original task 4 / independent drawing and calculation

Task 4

On grid paper with one square equal to one unit, choose coordinates for a scalene triangle with one horizontal side of length 7 units and a third vertex above the base. State your coordinates, calculate all three side lengths, and confirm the triangle is scalene.

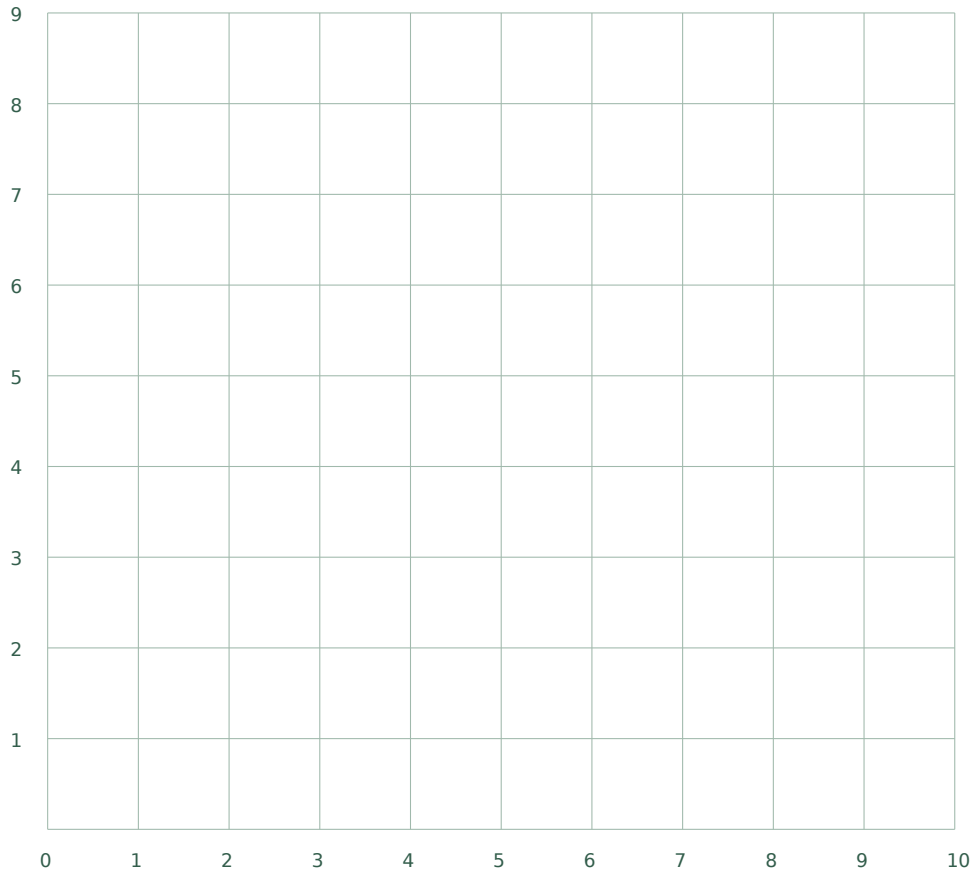
Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Full drawing sheet / reusable blank workspace

Reusable full drawing sheet for Tasks 1 to 4. Print another copy when needed. Keep all original task measurements; if a task specifies larger paper, use that paper size.

Task 1 / practice

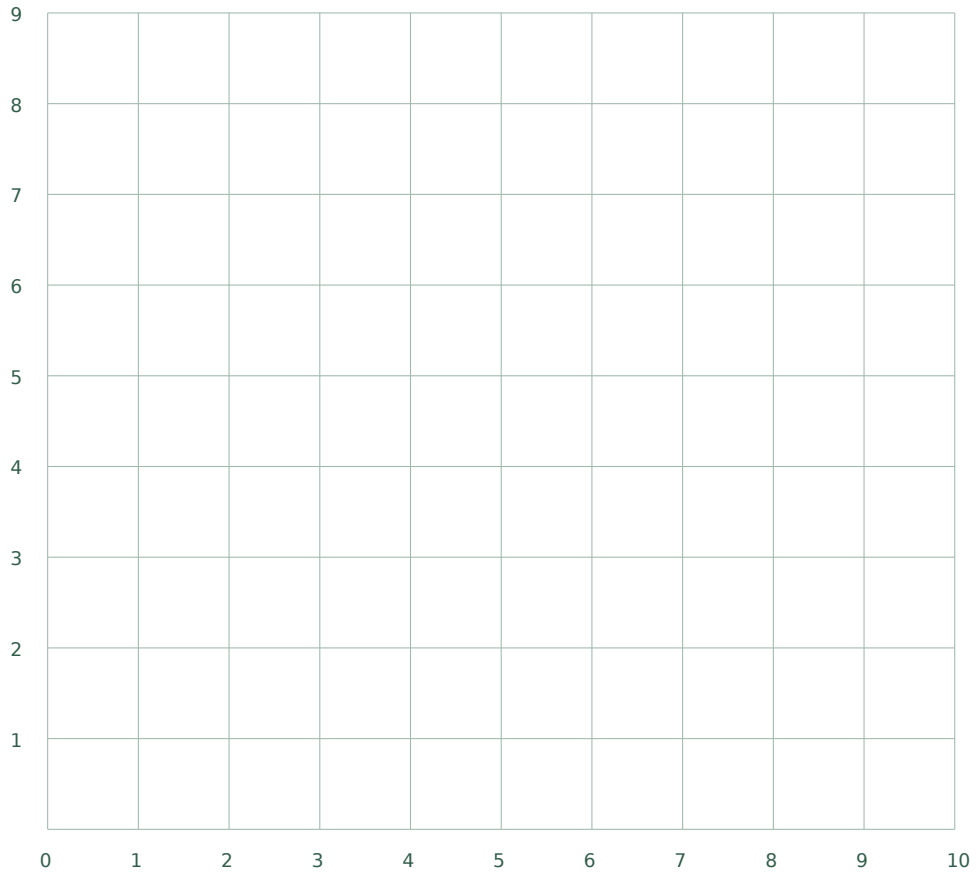
Chosen physical pitch 12 mm / one grid square = one abstract unit



Plot or construct from the original question, then show your side-length calculations. Task3's supplied triangle follows the original coordinates. Check the learner's claim yourself.

Task 2 / practice

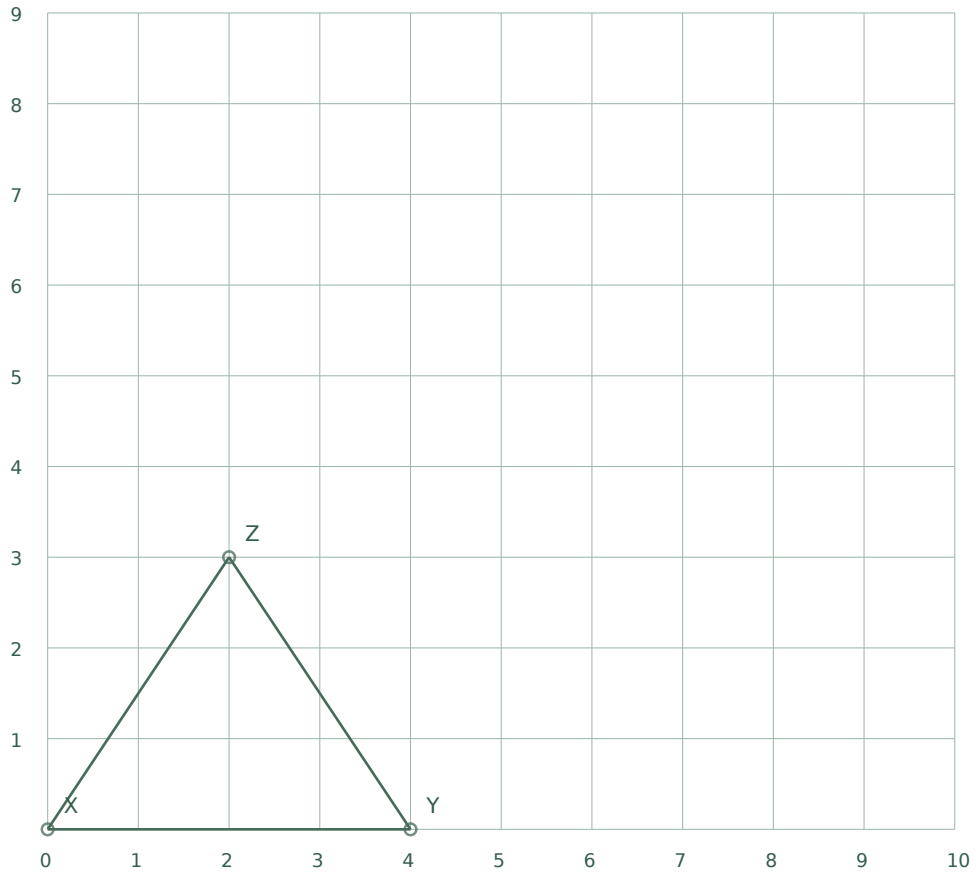
Chosen physical pitch 12 mm / one grid square = one abstract unit



Plot or construct from the original question, then show your side-length calculations. Task3's supplied triangle follows the original coordinates. Check the learner's claim yourself.

Task 3 / practice

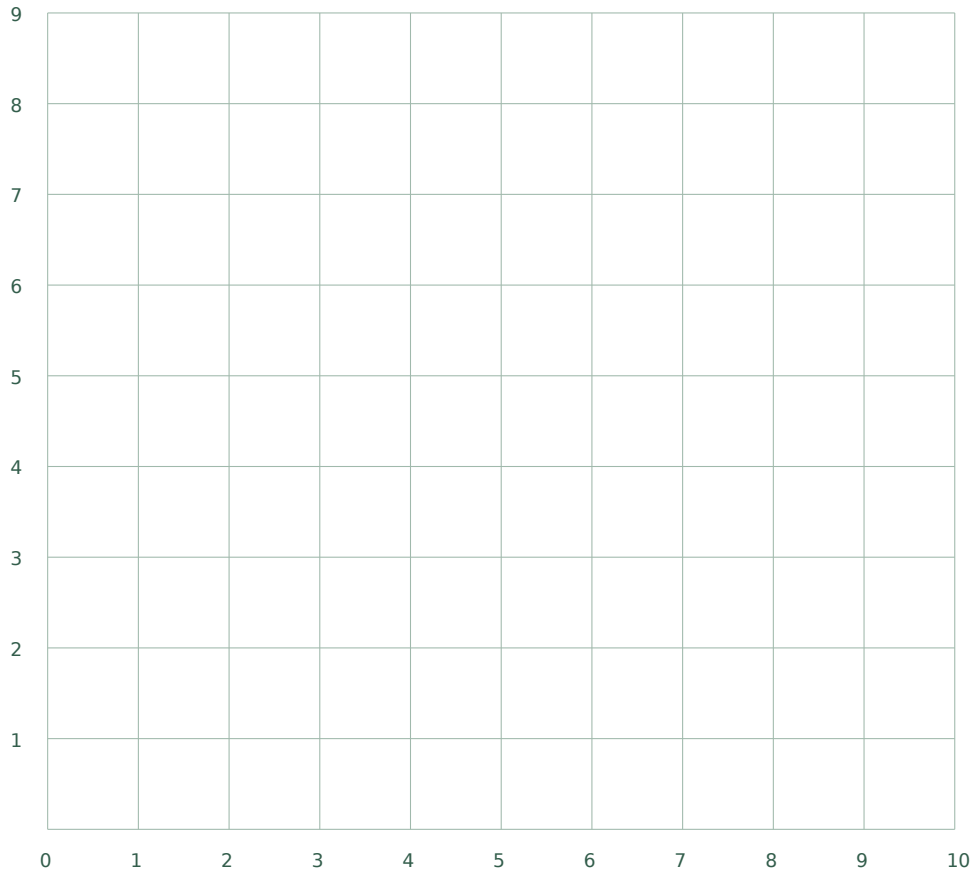
Chosen physical pitch 12 mm / one grid square = one abstract unit



Plot or construct from the original question, then show your side-length calculations. Task3's supplied triangle follows the original coordinates. Check the learner's claim yourself.

Task 4 / practice

Chosen physical pitch 12 mm / one grid square = one abstract unit



Plot or construct from the original question, then show your side-length calculations. Task3's supplied triangle follows the original coordinates. Check the learner's claim yourself.