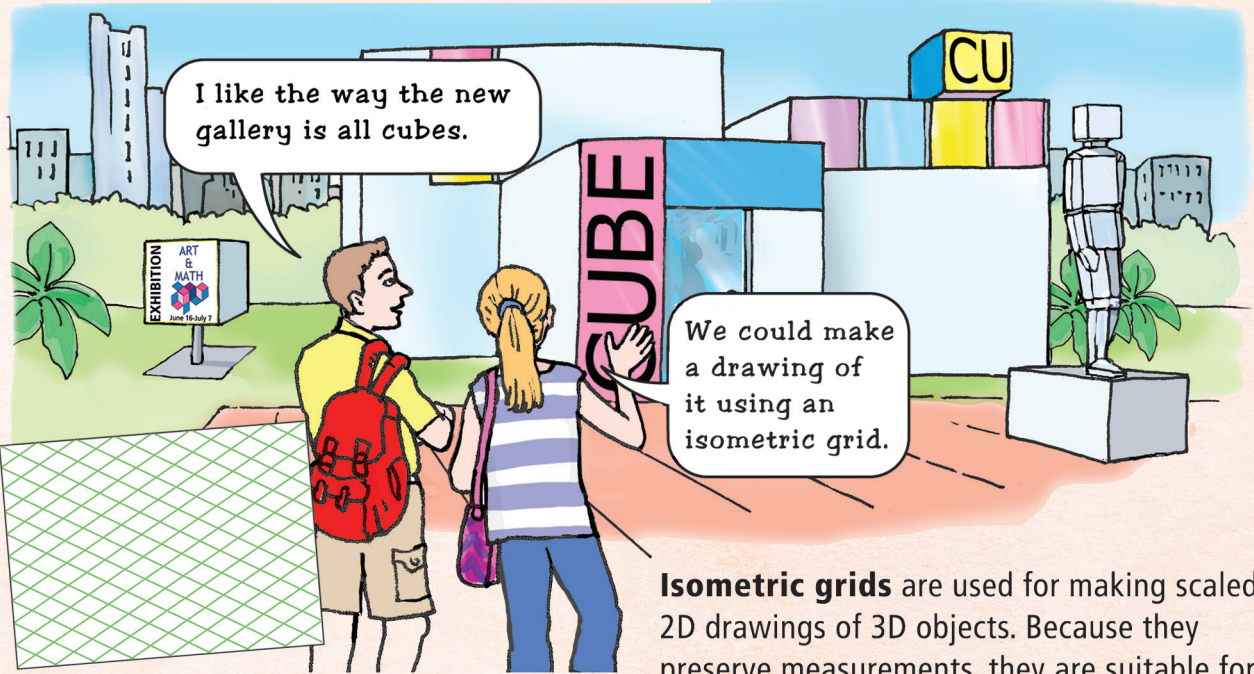


Drawing cubes

Use the isometric and parallel lines on your Mathomat to draw 3D-shapes.



Drawing an isometric grid

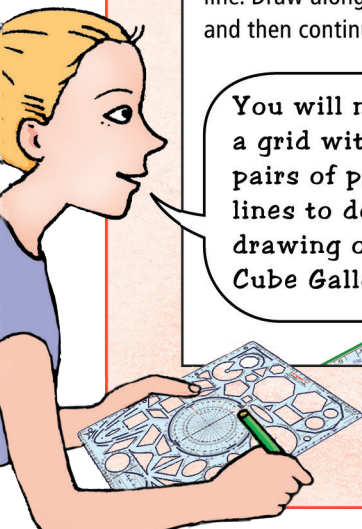
1 Draw intersecting lines at right angles lightly in pencil. Line up the **arrow** and the **isometric line** guide as shown. Draw a line along the edge of your Mathomat.

2 Rotate your Mathomat 60°. Draw a line along the edge of your Mathomat. You have now drawn the second diagonal line of the grid.

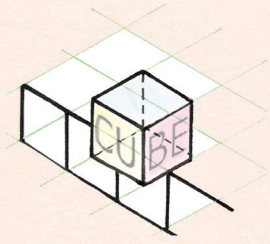
3 Slide your Mathomat upwards until the first **parallel line** guide matches this diagonal line. Draw along the edge of the Mathomat and then continue with more parallel lines.

You will need a grid with 15 pairs of parallel lines to do the drawing of the Cube Gallery.

4 Rotate the Mathomat back to its original position and slide it so the parallel line guide matches the first diagonal line made. Draw a new line. Continue doing this until your isometric grid is complete.

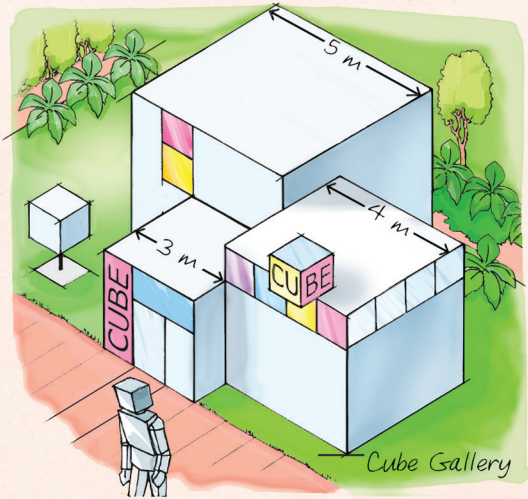


Isometric drawing



These two drawings were made on isometric grids. The protruding sign has sides of 1 metre, shown left with the grid lines still visible.

Can you draw an isometric sketch of the gallery in the area below?



Draw the grid as shown on the opposite page. Place the vertex of the 4 m cube section on the cross-hair, to be sure of the whole building fitting in.