We can use what we know about slope to decide if a point lies on a line. Here is a line with a few points labeled.

The slope triangle with vertices (0, 1) and (2, 5) gives a slope of \( \frac{5-1}{2-0} = 2 \). The slope triangle with vertices (0, 1) and \((x, y)\) gives a slope of \( \frac{y-1}{x} \). Since these slopes are the same, \( \frac{y-1}{x} = 2 \) is an equation for the line. So, if we want to check whether or not the point (11, 23) lies on this line, we can check that \( \frac{23-1}{11} = \frac{22}{11} = 2 \). Since (11, 23) is a solution to the equation, it is on the line!