Graphing a Line Fast

9th Grade

Four points plotted in under thirty seconds, from any form.

Whatever form you are given, get to two points as quickly as possible.

1. **FROM y = mx + b**
   Plot b on the y-axis, then rise-over-run to a second point.

2. **FROM STANDARD FORM**
   Set x = 0 for the y-intercept, y = 0 for the x-intercept.

3. **FROM TWO POINTS**
   Plot both and join them. No equation needed.

4. **CHECK WITH A THIRD**
   Step the slope once more. If it is off the line, something is wrong.

WORKED: Y = −2X + 4

Plot (0, 4)
Slope −2 = down 2, right 1 → (1, 2)
Again → (2, 0). Three points, straight line.

A negative slope goes down as you move right. Getting that backwards is the commonest graphing error.