

Algebra 1 4.2

Write an equation of a line given a slope and a point

Write an equation of a line given two points

slope m

y-intercept B

linear equation

slope-intercept form

constraints

linear extrapolation

$$y = mx + B$$

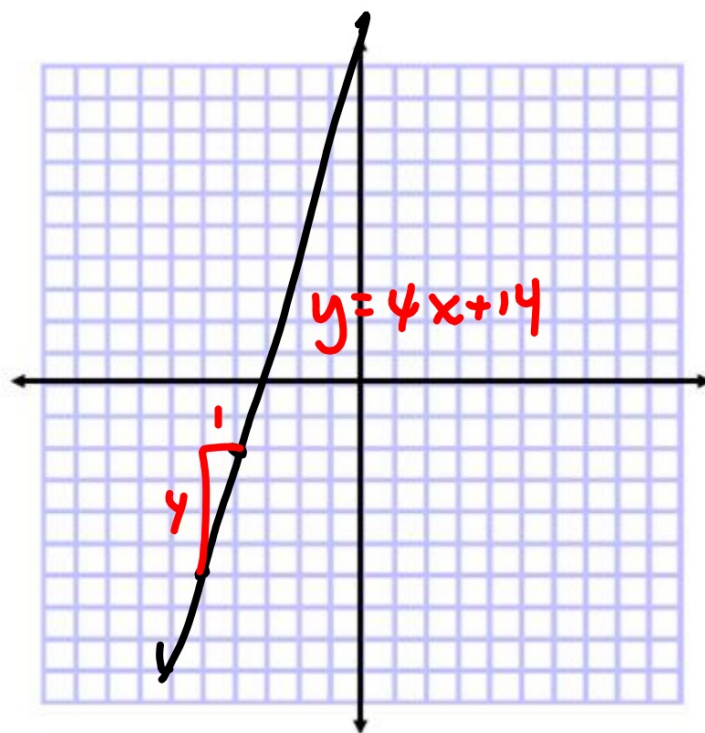
activity: speed dating

Whiteboards

Write the equation of the line:

b. $(-4, -2)$ and $(-5, -6)$

$$\begin{aligned} m &= 4 \\ y &= mx + B \\ -2 &= 4 \cdot (-4) + B \\ -2 &= -16 + B \\ +16 & \quad +16 \\ \hline 14 &= B \end{aligned}$$



Write an equation of the line that passes through each pair of points.

5. $(4, -3), (2, 3)$

6. $(-7, -3), (-3, 5)$

Speed dating

1. Solve your problem.
2. Check with me.
3. You are now the expert on this problem.
4. Wait for instructions.