Algebra 1   4.2
Write an equation of a a line given a slope and a point
Write an equation of a line given two points

slope
y-intercept
linear equation
slope-intercept form
constraints
linear extrapolation

activity: speed dating

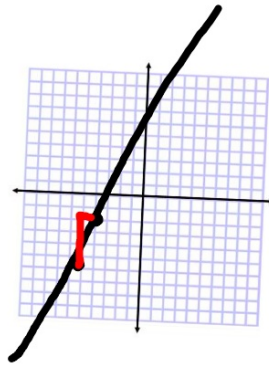Whiteboards

$$y = 4x + 14$$

Write the equation of the line.

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

$m = \dfrac{4}{1}$ $y = 4x + B$

$-2 = 4 \cdot -4 + B$

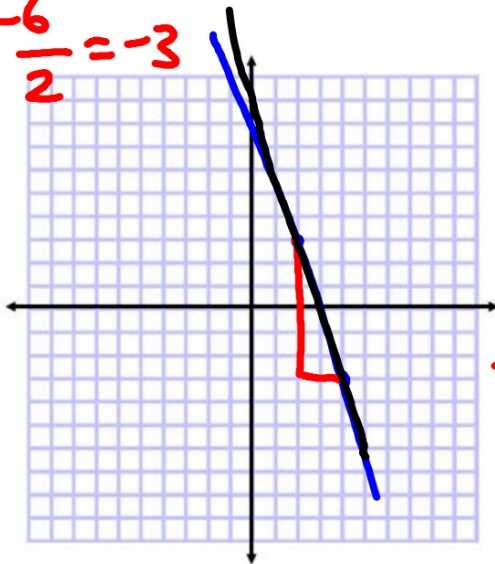$B = 14$ $-2 = -16 + B$

$+16 \quad +16$

$$y = -3x + 9$$

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

5. $(4, -3), (2, 3)$　　　　**6.** $(-7, -3), (-3, 5)$

$$m = \frac{-6}{2} = -3$$

$$y = -3x + B$$

$$3 = -3 \cdot 2 + B$$

$$3 = -6 + B$$

$$\underline{+6 \quad +6}$$

$$9 = B$$

Speed dating

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