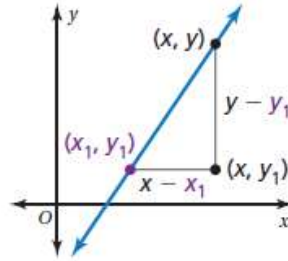## Key Idea

Point-Slope Form

Words   A linear equation written in the form $y - y_1 = m(x - x_1)$ is in **point-slope form**. The line passes through the point (x_1, y_1), and the slope of the line is m.

slope

Algebra $y - y_1 = m(x - x_1)$

passes through (x_1, y_1)

(x, y)

$y - y_1$

(x_1, y_1)

$x - x_1$ (x, y_1)

Ex:) Write an equation in point-slope form of the line that passes through the point   Notes:

(-6, 1) with a slope of $\dfrac{2}{3}$.

OYO:) Write an equation in point-slope form of the line that passes through the point   Notes:

(-8, -5) with a slope of $-\dfrac{3}{4}$.

OYO:) Write an equation in slope-intercept form of the line that passes through the given points.

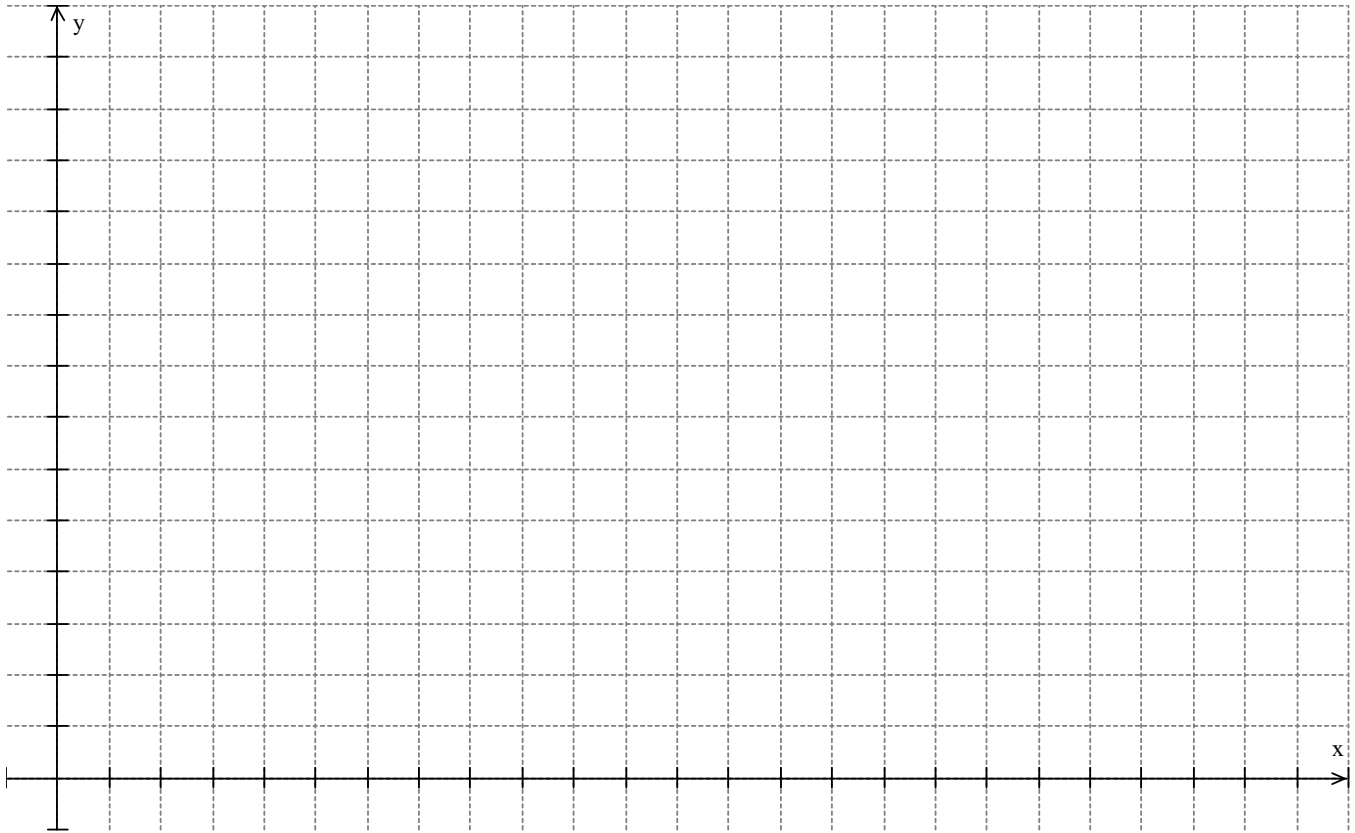| x	y
−1	10
2	4
5	−2

Ex:) You finish parasailing and are being pulled back to the boat. After 2 seconds, you are 25 feet above the boat. At what height were you parasailing?
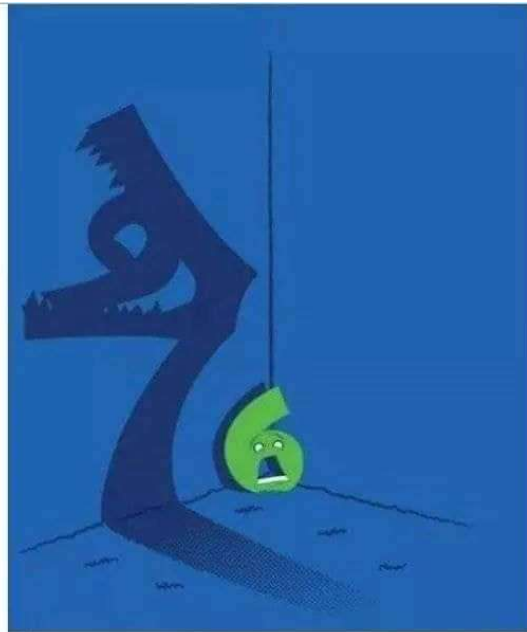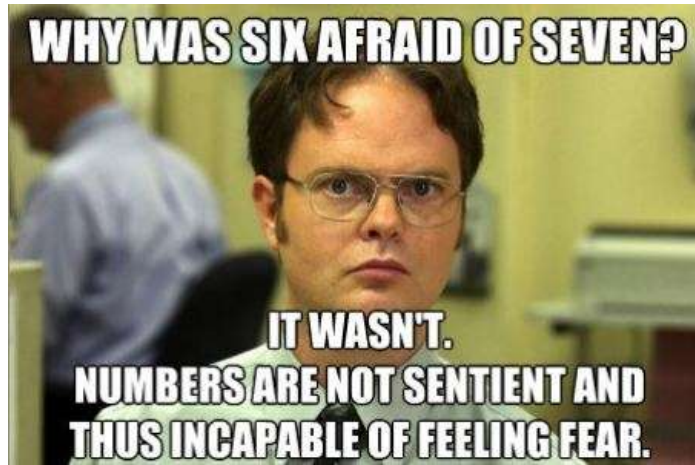
10 feet per second

OYO:) You and your friend begin to run along a path at different constant speeds. After 1 minute, your friend is 45 meters ahead of you. After 3 minutes, your friend is 105 meters ahead of you.

a. Write and graph an equation for the distance y (in meters) your friend is ahead of you after x minutes. Justify your answer.

b. Did you and your friend start running from the same spot? Explain your reasoning.

WHY WAS SIX AFRAID OF SEVEN?

IT WASN'T.
NUMBERS ARE NOT SENTIENT AND
THUS INCAPABLE OF FEELING FEAR.

THE
LOLBRARY.com/post/18287/

astericksarestars:

specialagentartemis:

I feel like I have been waiting for this my entire life

I just fell out of my chair.

97,325 notes