

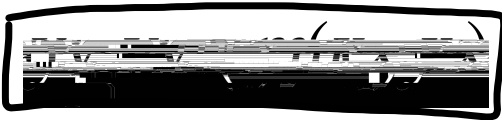
Lesson 1.4 - Writing Linear Equations

What is a line? a straight conner



$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Slope Formula



Point Slope Form of a Line



Slope-Intercept Form of a Line

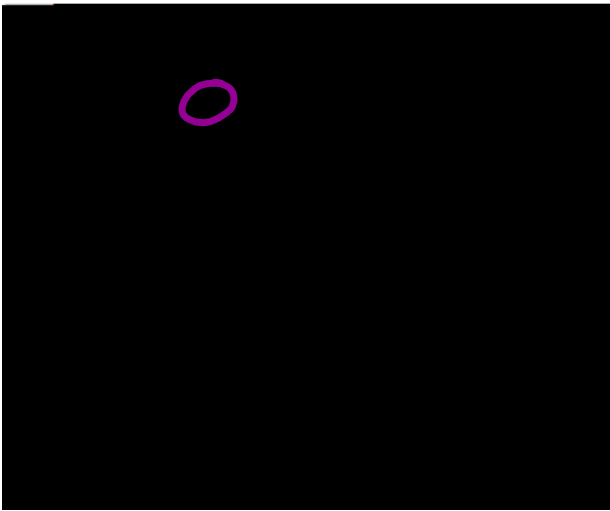


Standard Form of a Line

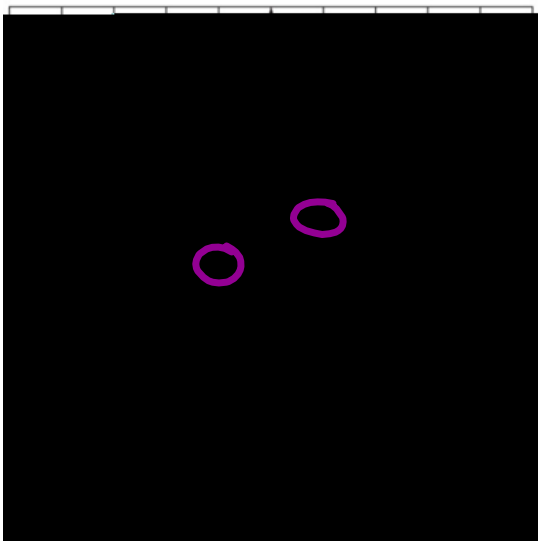
A must be positive

No fractions, no decimals!!

Write the equation of the line in slope-intercept form



Write the equation of the line in slope-intercept form



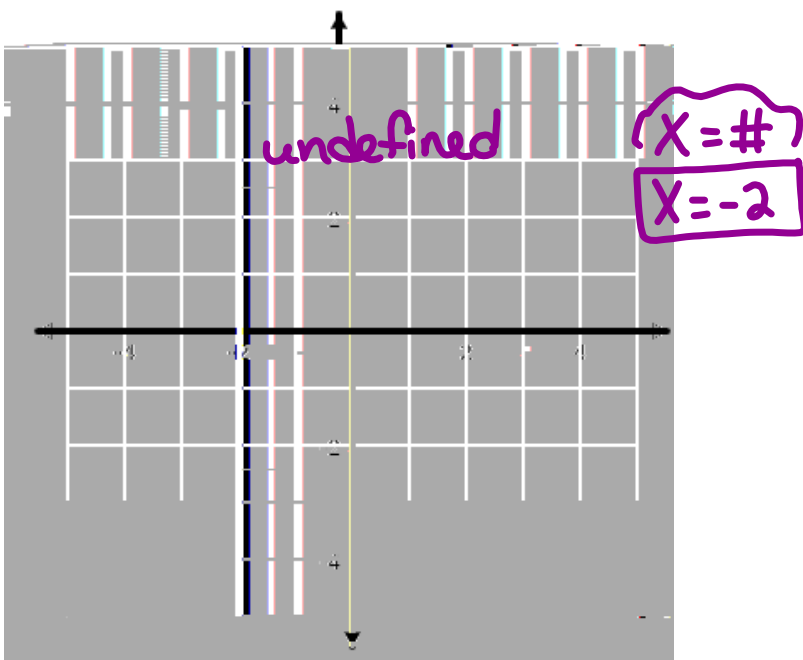
2 pts: (

Write the equation of the line in slope-intercept form

zero slop

$$y = 3$$

Write the equation of the line in slope-intercept form



Write the equation of the line in slope intercept form of the line that passes through $(4, -5)$ with a slope of x_1

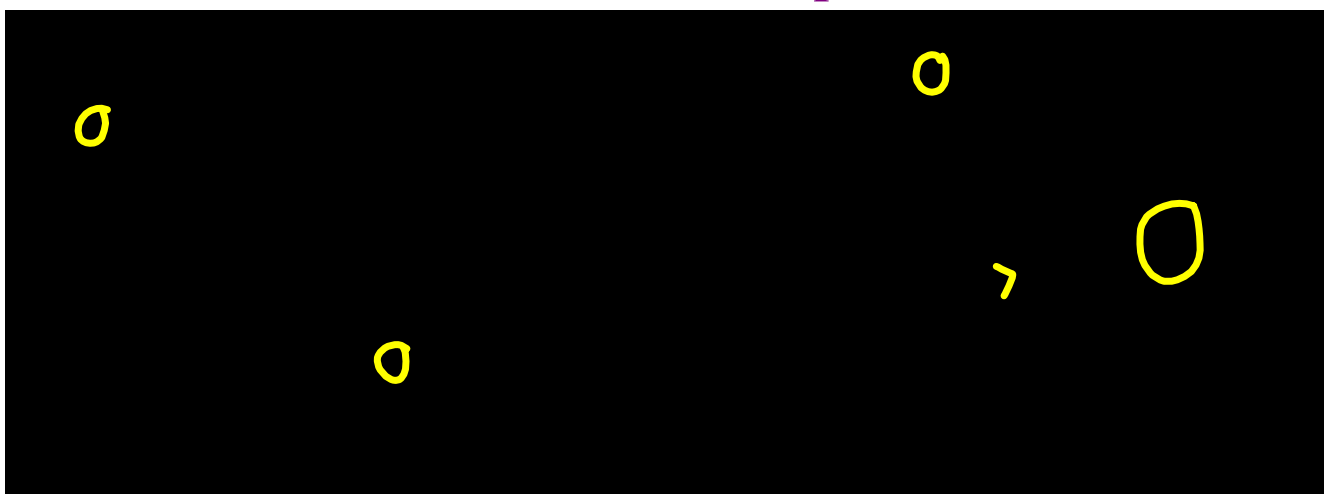
pt-slope: $y-$


Write the equation of the line in slope intercept form of the line that passes through $(0, 4)$ with a slope of -2


$$y = -$$

Parallel lines
have the same
slope

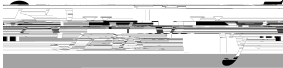
Perpendicular lines have
OPPOSITE slopes
(opposite sign &
reciprocal)



Write the equation of the line in slope intercept form parallel to  and passes through (0,-7)

Write the equation of the line in slope intercept form
parallel to  & passes through (1,-2)

$$y - y_1 =$$

Write the equation of the line in slope intercept form
perpendicular to  & passes through
(-1,3)

Write the equation of the line in slope intercept form
perpendicular to $y = \frac{1}{2}x - 2$ & passes through
(4,-5)