

Linear Equations Review

21 i)  $3(y+1) = 2x-3$

$3y+3 = 2x-3$

$\frac{3y}{3} = \frac{2x-6}{3}$

$y = \frac{2}{3}x - 2$

Slope (m) =  $\frac{2}{3}$

OR

$\frac{3(y+1)}{3} = \frac{2x-3}{3}$

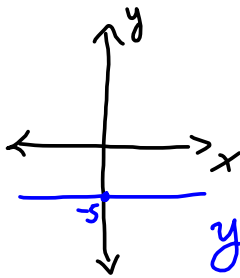
$y+1 = \frac{2}{3}x - 1$

$y = \frac{2}{3}x - 2$

Slope (m) =  $\frac{2}{3}$

← Same →

A line that is parallel to the x-axis:

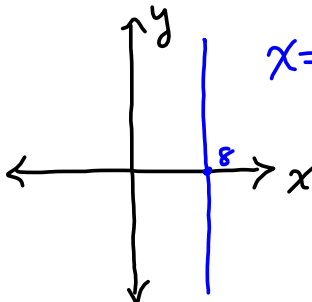


$y = -5$  (equation)

x-intercept: none  
y-intercept:  $(0, -5)$

Slope (m) = 0

A line that is parallel to the y-axis:

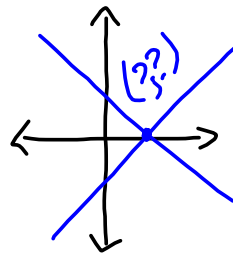


$x = 8$  (equation)

y-intercept: none  
x-intercept:  $(8, 0)$

Slope (m) is undefined

Solving Equations



① graphing

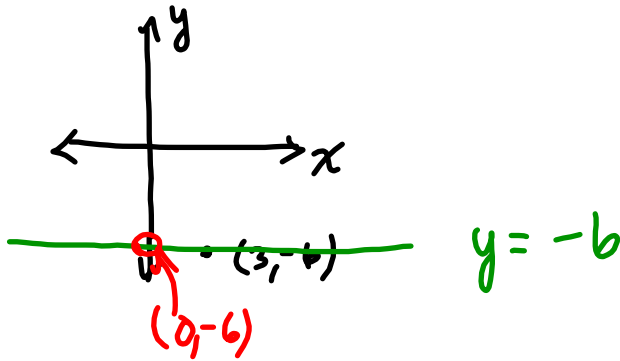
② substitution \*

③ elimination

④ matrices

# Review of Linear Equations

g. parallel to x-axis, passing through (3, -6)  
(m=0)



$$y = mx + b$$

$$y = 0(x) + (-6)$$

$$y = -6$$

h) x-intercept of -2 and perpendicular to  $5x - y + 2 = 0$   
(-2, 0)

II | I  
---|  
III | IV

slope of  $-\frac{1}{5}$   
↓  
point-slope

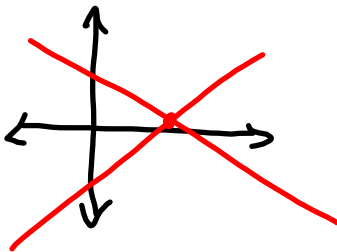
$y = mx + b$  to find slope

$$5x - y + 2 = 0$$

$$-y = -5x - 2$$

$$y = 5x + 2$$

perpendicular line will have slope of  $-\frac{1}{5}$



## Solving Systems of Equations

- ① Graph (by hand / calculator)
- ② Substitution
- ③ elimination
- ④ matrices

# Linear Equations Review

i) parallel to the y-axis passing through (4,1)

