

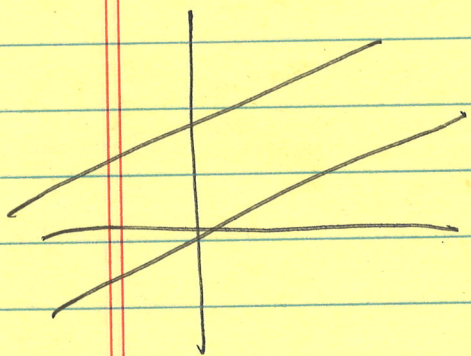
Lecture 9/15/2023: Modeling Linear Equations

HW due: 12, 13, 14, 15, 16
Tod Sun Mon Wed Fri

Quiz 3 Today
Exam 1 Next Tuesday

Webwork / Learning
class

Defn: 1) Two lines are parallel if they have the ~~sa~~ same slope but different y-int.



2) The ^Aline perpendicular to $y = mx + b$ has slope $m' = -\frac{1}{m}$ (any y-int will work)

Ex: Find equations for

1) Line parallel to $x - y = 4$ goes through $(4, -7)$

$$y = x - 4$$

Slope = ~~4~~

point $(4, -7)$

P-S-F: $y = x - 4 - 7$

2) Perpendicular to $5x + y = 8$ through $(2, -1)$

$$y = 8 - 5x$$

Slope -5

Point $(2, -1)$

P-S-F: $y = -5(x - 2) - 1$

#6 a) ∞

b) ∞

c) 1