

COBECOM Meeting 2

- ① How economists think through examples
- ② Connections to meeting 1
- ③ Questions posed in the announcements
- ④ Making choices

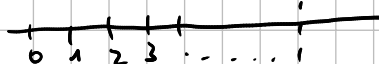
What will we be choosing from?

Scarcity \rightarrow limited
 \rightarrow desirable

	limited	"unlimited"
desirable	✓	
*undesirable		

dimensions of scarcity

one-dimension



pairs of shoes

when you draw this, think of pairs of shoes as being alike

60-58

goods & things are fungible

two-dimensions



units of all other goods

Q_2

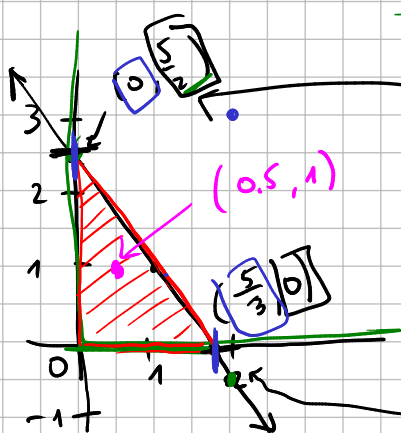


pairs of shoes Q_1

price of a pair of shoes P_1 & number of pairs of shoes Q_1 +
 price of a unit of all other goods P_2 & number of units of all other goods Q_2 = income/budget m (not in book)

$$P_1 Q_1 + P_2 Q_2 = m$$

$$3x + 2y = 5$$



$$3(0.5) + 2(1) = 3.5$$

$$3(0) + 2y = 5 \Rightarrow y = 5/2$$

$$3x + 2(0) = 5 \Rightarrow x = 5/3$$

$$3(0) + 2y = 5 \Rightarrow y = 5/2$$

$$3(1) + 2y = 5 \Rightarrow y = 1$$

$$3(2) + 2y = 5 \Rightarrow y = -1/2$$

in our context, this does not make sense

$$3x + 2y = 5 \Rightarrow \text{solve for } y \Rightarrow 2y = -3x + 5 \Rightarrow y = -\frac{3}{2}x + \frac{5}{2}$$

(algebra) slope-intercept form
 $y = mx + b$
 NOT income!

slope of the line $-\frac{3}{2}$

slope = $\frac{\text{rise}}{\text{run}} = \frac{\text{vertical distance}}{\text{horizontal distance}}$
 pick any 2 points

$(0, \frac{5}{2})$ $(\frac{5}{3}, 0)$

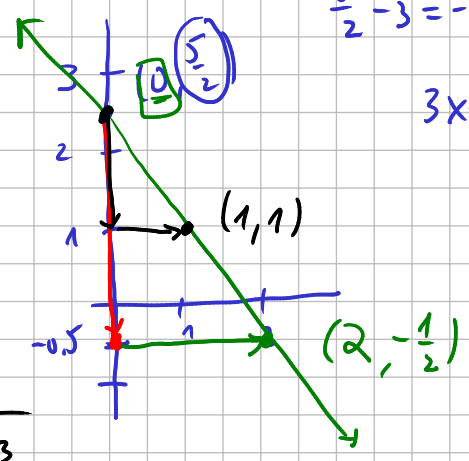
$(0, \frac{5}{2})$ $(1, 1)$
 slope = also $-\frac{3}{2}$

$$\begin{aligned} \text{slope} &= \frac{\frac{5}{2} - 0}{0 - \frac{5}{3}} \quad \text{or} \quad \frac{0 - \frac{5}{2}}{\frac{5}{3} - 0} \\ &= \frac{5/2}{-5/3} \quad \text{or} \quad \frac{-5/2}{5/3} \\ &= \frac{5}{2} \div (-\frac{5}{3}) \quad \text{or} \quad (-\frac{5}{2}) \div \frac{5}{3} \\ &= \frac{5}{2} \cdot (-\frac{3}{5}) \quad \text{or} \quad (-\frac{5}{2}) \cdot \frac{3}{5} \\ &= -\frac{3}{2} \quad \text{or} \quad -\frac{3}{2} \end{aligned}$$

economics
 slope $\hat{=}$ what you must give up to get something!

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

$$\begin{aligned} &= \frac{-1.5}{1} = \frac{1.5}{-1} \\ &= \frac{1}{-2/3} = \frac{-1}{2/3} \end{aligned}$$



$$\frac{5}{2} - 3 = -\frac{1}{2}$$

$$3x + 2y = 5$$