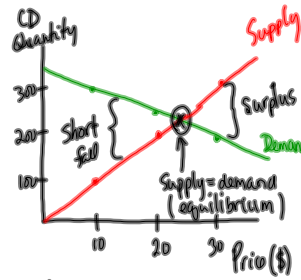


Supply + Demand

Local Band makes a CD

Price	Demand	Supply
\$10	300	100
\$20	250	200
\$30	200	300



Surplus is when the supply is greater than the demand
Shortfall is when the demand is greater than the supply

Demand Equation

(10, 300) let x be the price of the CD
 (20, 250) y be the demand

find the slope:

$$m = \frac{\Delta y}{\Delta x}$$

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

$$m = \frac{250 - 300}{20 - 10}$$

$$m = \frac{-50}{10}$$

$$m = -5$$

$$y = mx + b$$

$$300 = -5(10) + b$$

$$300 = -50 + b$$

$$350 = b$$

$$y = -5x + 350 \text{ DEMAND}$$

Supply Equation

(10, 100) let x be the price of the CD
 (20, 200) y be the supply

find the slope:

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

$$m = \frac{200 - 100}{20 - 10}$$

$$m = \frac{100}{10}$$

$$m = 10$$

$$y = mx + b$$

$$100 = 10(10) + b$$

$$-100 + 100 = 100 + b - 100$$

$$b = 0$$

$$y = 10x \text{ SUPPLY}$$

What is the best price? (i.e. equilibrium pt)

Demand: $y = -5x + 350$

Supply: $y = 10x$

↓
supply = demand

$$-5x + 350 = 10x$$

$$-15x + 350 = 0$$

$$\frac{-15x}{-15} = \frac{-350}{-15}$$

$$x = \$23.33 \leftarrow \text{ideal price!}$$