

Q5

$$Q = 8.56 - p - 0.3p_s + 0.1Y$$

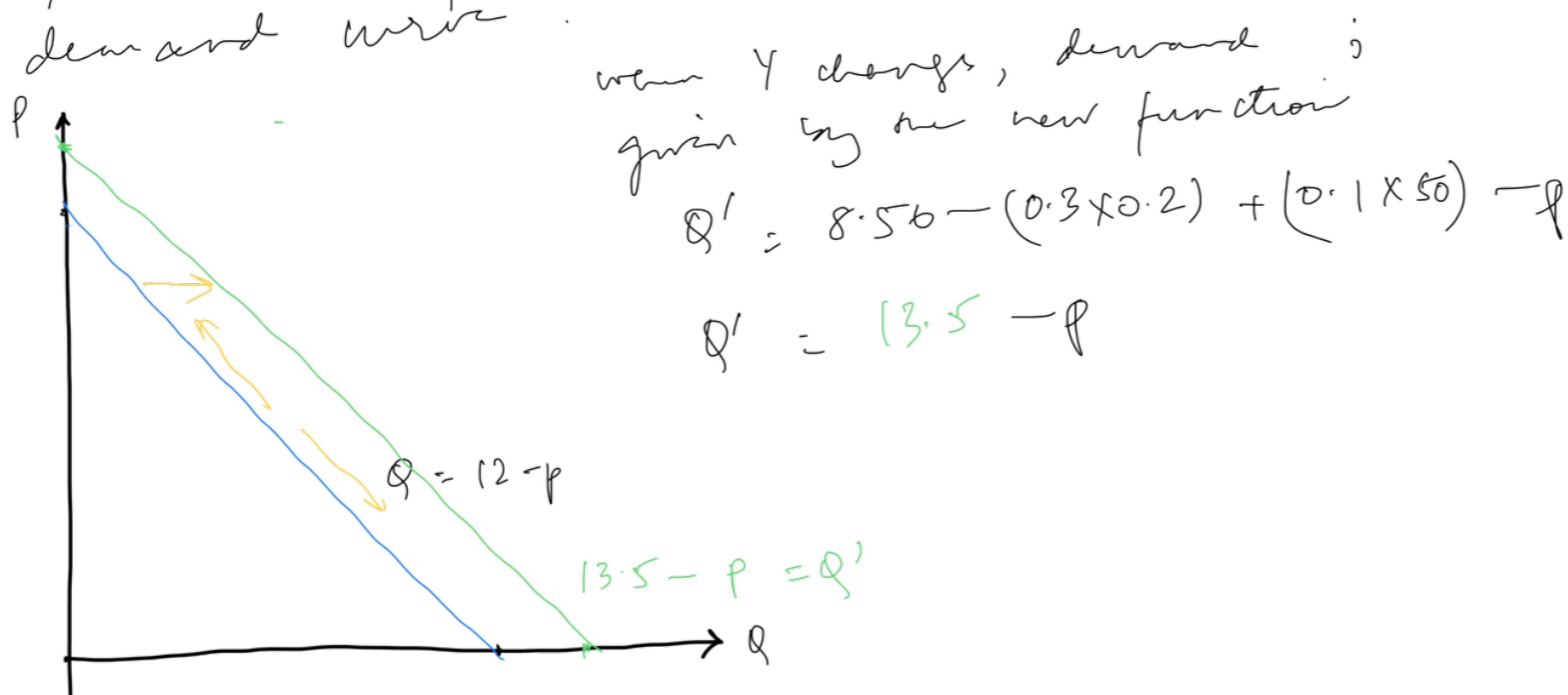
1) Relation b/w Q & p_s
 If $p_s \uparrow$ it causes $Q \downarrow$ \therefore Sugar is a complement for coffee.

2) $p_s = 0.2$, $Y = 35$

$$Q = 8.56 - (0.3 \times 0.2) + (0.1 \times 35) - p$$

$$Q = 12 - p$$

3) Y increases from 35 to 50 \Rightarrow effect on demand curve.



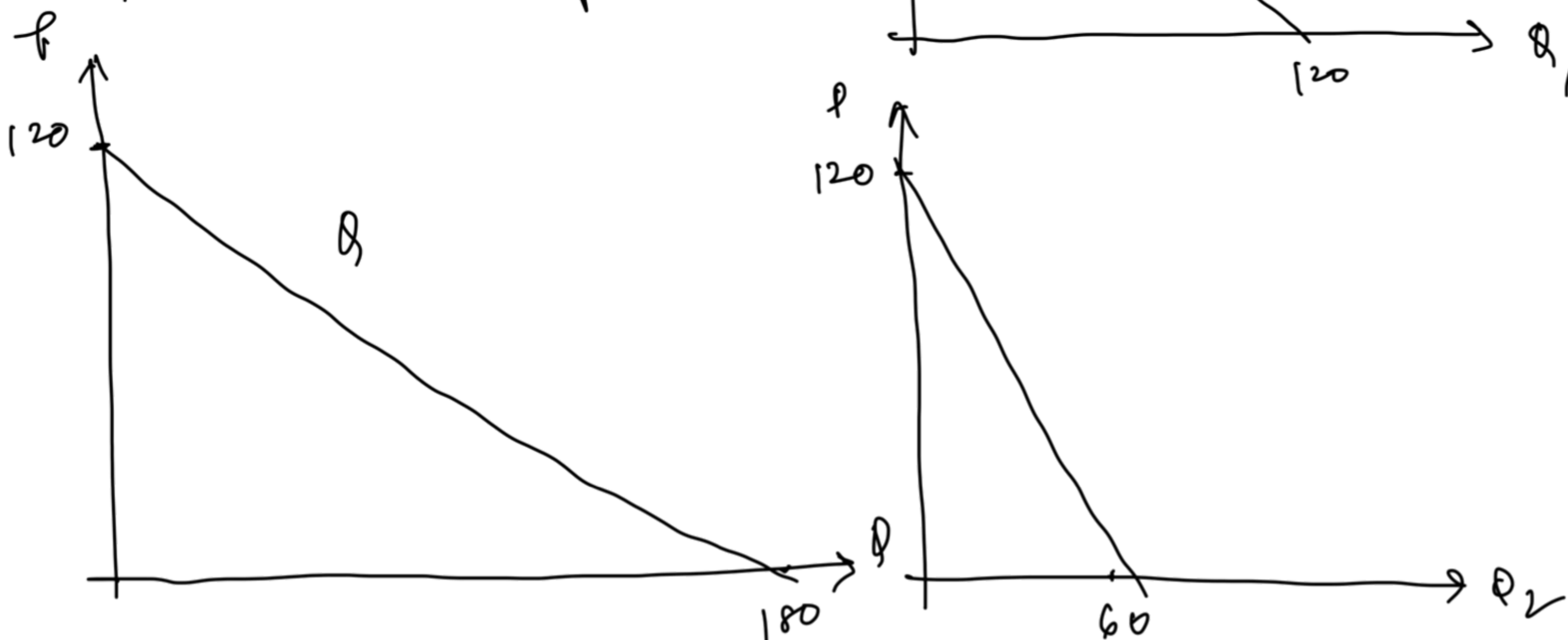
Q8

$$Q_1 = 120 - p$$

$$Q_2 = 60 - 0.5p$$

$$Q = Q_1 + Q_2$$

$$Q = 180 - 1.5p$$



Q4

$$Q_1 = 100 - p \quad (1) \text{ If } Q_1 = 0, p = 100$$

$$Q_2 = 50 - p \quad (2) \text{ If } Q_2 = 0, p = 50$$

we know that $Q_1 \geq 0$, $Q_2 \geq 0$ & $p \geq 0$

