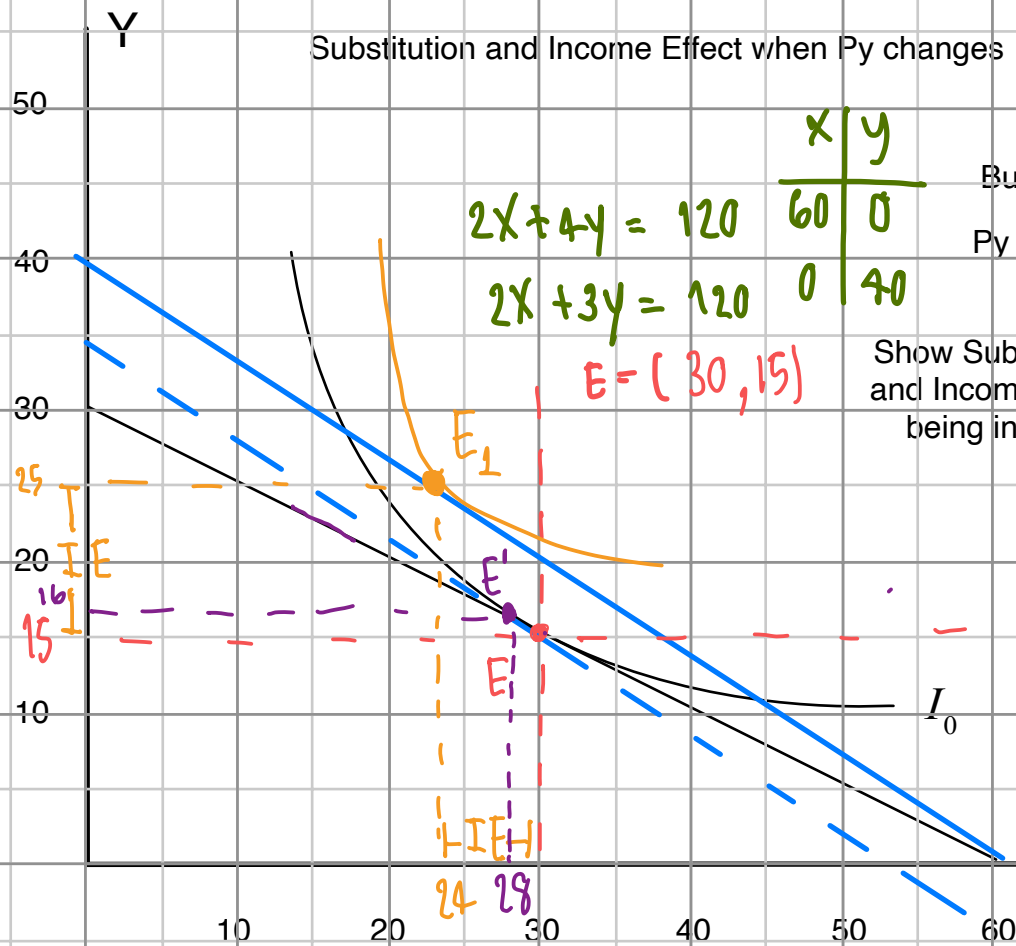


Substitution and Income Effect when P_y changes



X	Y
60	0
0	40

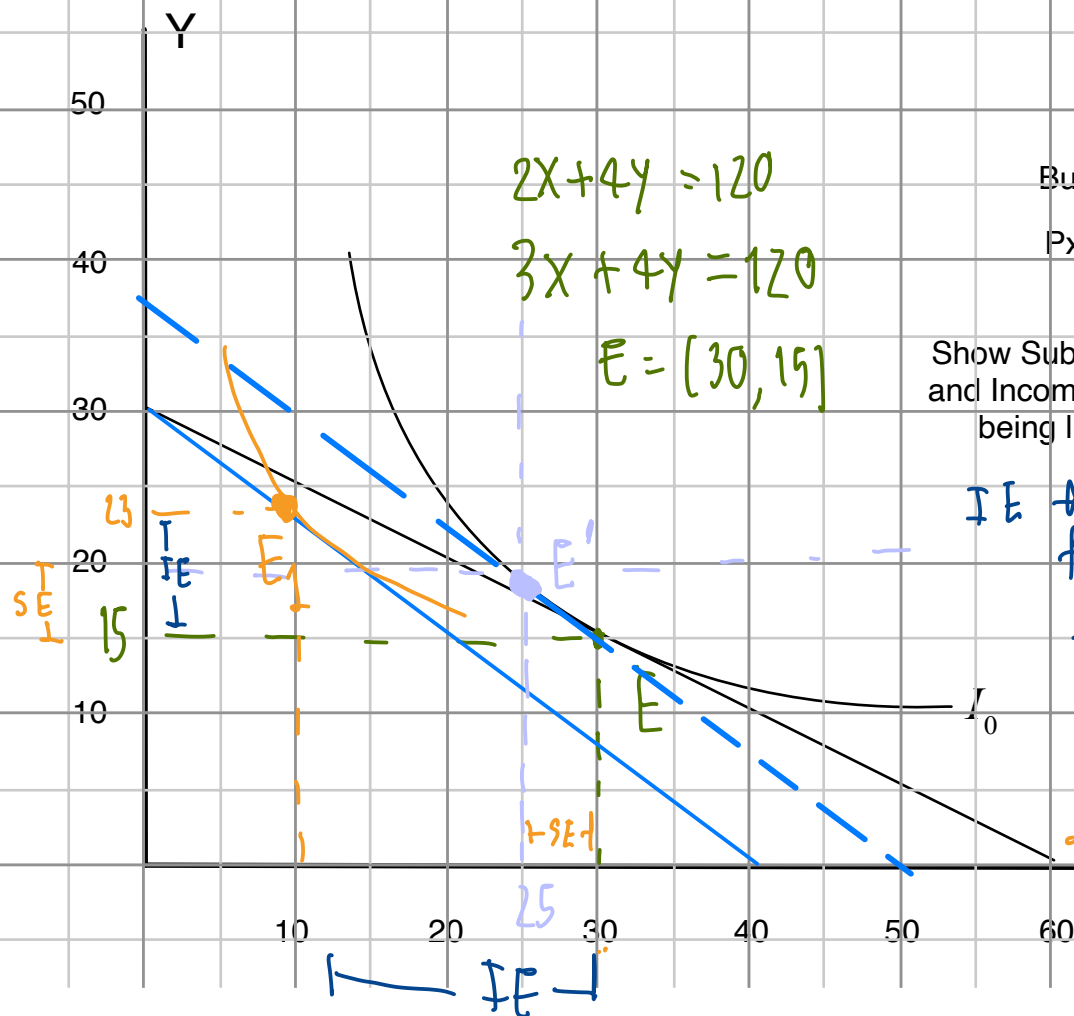
$P_x = 2$
 $P_y = 4$
 Budget = 120
 P_y decreases to 3

Show Substitution Effect and Income Effect with X being inferior goods

IE $\rightarrow$ Income Effect
 for X $(24 - 30) = -6$
 for Y $(25 - 15) = 10$

SE $\rightarrow$ Substitution Effect

for X $(28 - 30) = -2$
 for Y $(16 - 15) = 1$



$$2X + 4Y = 120$$

$$3X + 4Y = 120$$

$$E = (30, 15)$$

$P_x = 2$
 $P_y = 4$
 Budget = 120
 P_x increases to 3

Show Substitution Effect and Income Effect with X being luxury good

IE $\rightarrow$ Income Effect
 for X $(10 - 30) = -20$
 for Y $(23 - 15) = 8$

SE $\rightarrow$ substitution Effect

for X $(25 - 30) = -5$
 for Y $(19 - 15) = 4$