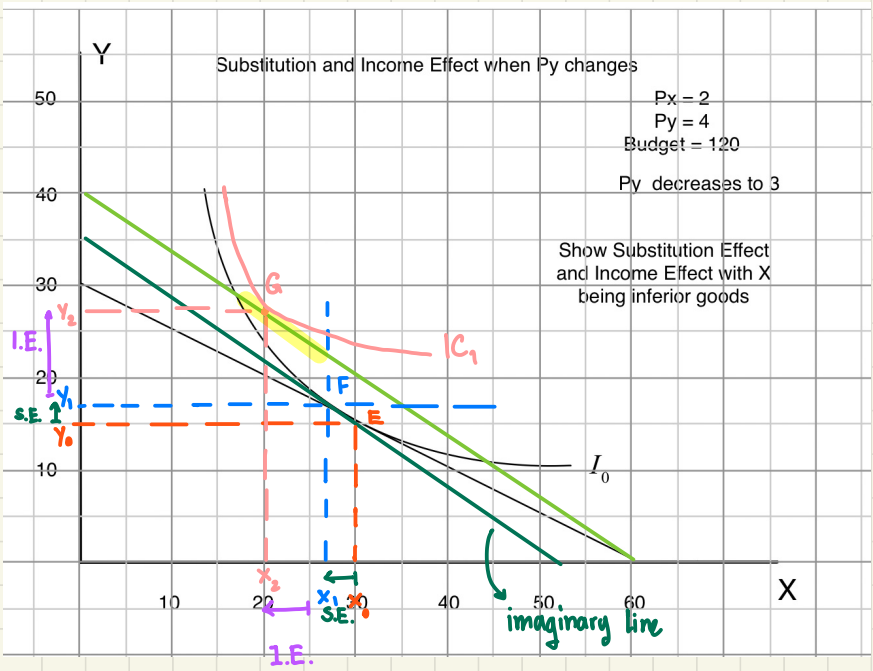
H.W. due 29 OCT 2020

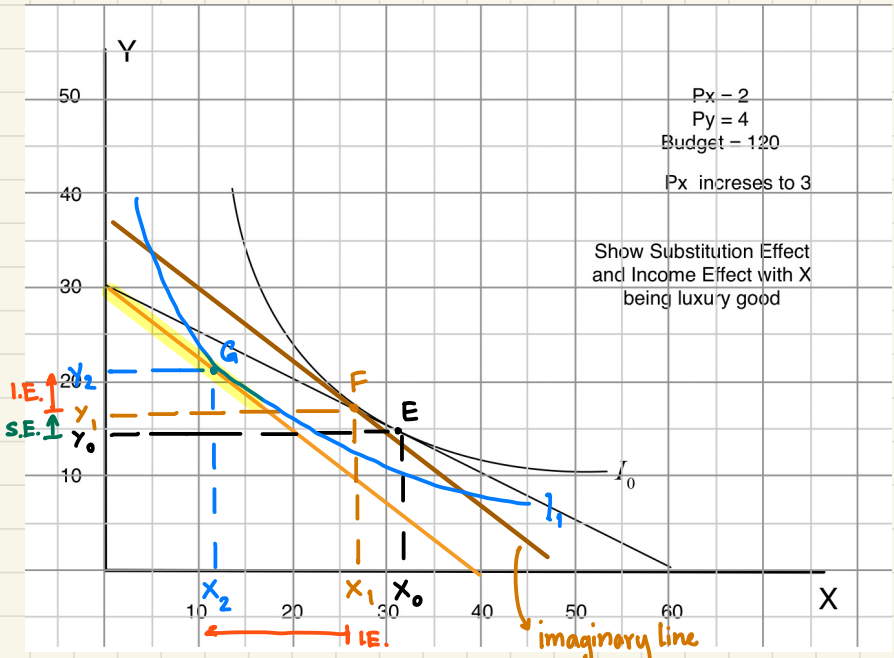


- $2X+4Y=120$
  when $X=0,\ Y=30$
  $Y=0,\ X=60$
- $2X+3Y=120$
  when $X=0,\ Y=40$
  $Y=0,\ X=60$

S.E. on $x = x_1 - x_0$
$y = y_1 - y_0$

I.E. on $x = x_2 - x_1$ <0 $\Rightarrow$ inferior
$y = y_2 - y_1$ >0 $\Rightarrow$ luxury

Now Eq. G can be anywhere on yellow area so that x is inferior.



- $2X + 4Y = 120$
- $3X + 4Y = 120$
  - ↳ new budget line
  - when $x=0$, $y=30$
  - $y=0$, $x=40$

S.E. on $X = X_1 - X_0$

$Y = Y_1 - Y_0$

I.E. on $X = X_2 - X_1$ < 0 $\Rightarrow$ X is luxury.

$Y = Y_2 - Y_1$ > 0 $\Rightarrow$ inferior

New Eq. G can be anywhere on yellow area so that x is luxury.