

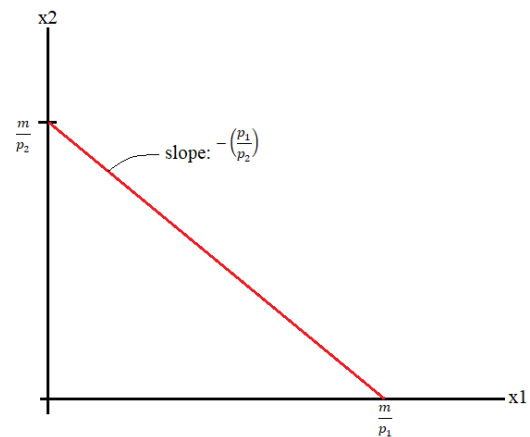
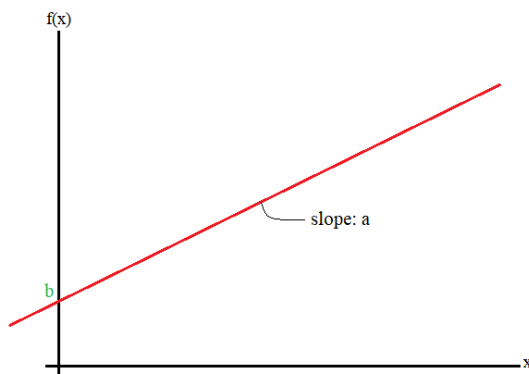
Budget line

$$p_1x_1 + p_2x_2 = m$$

$$p_2x_2 = m - p_1x_1$$

$$x_2 = \underbrace{\left(\frac{m}{p_2}\right)}_{\text{Intercept}} - \underbrace{\left(\frac{p_1}{p_2}\right)}_{\text{Slope}} x_1$$

- $f(x) = \underbrace{b}_{\text{Intercept}} + \underbrace{\tilde{a}}_{\text{Slope}} x$



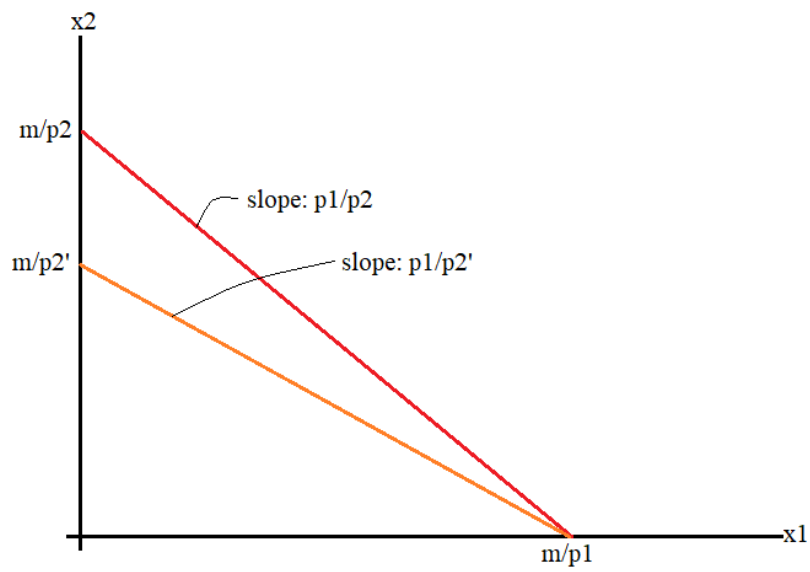
Question 1

$$p_1x_1 + p_2x_2 = m$$

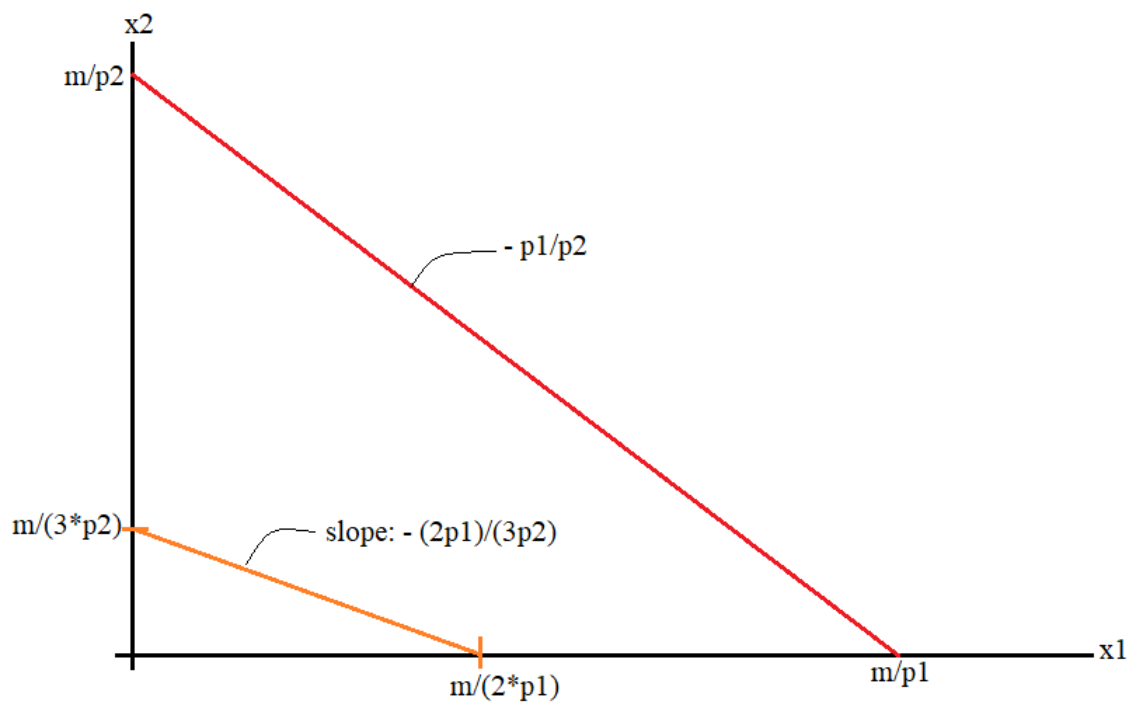
$$2p_1x_1 + 8p_2x_2 = 4m$$

$$p_1x_1 + 4p_2x_2 = 2m$$

Question 2



Question 3



The line becomes flatter.

Question 4

It is the good i where $p_i = 1$. Everything else is measured relative to this good.

Question 6

Original budget:

$$p_1x_1 + p_2x_2 = m$$

Modified budget:

$$\overbrace{(p_1 + t)}^{p'_1} x_1 + (p_2 - s)x_2 = m - u$$

Question 7

Yes. Because both an increase in the income and a decrease in the prices are good for the individual.