

2 Fullform comparison

x : quantity

p : market price

$$a) E: x = -10p + 800$$

$$p = 80 - \frac{x}{10}$$

$$T: x = 10p - 200$$

$$p = 20 + \frac{x}{10}$$

Firm's welfare

$$E = T$$

$$-10p + 800 = 10p - 200$$

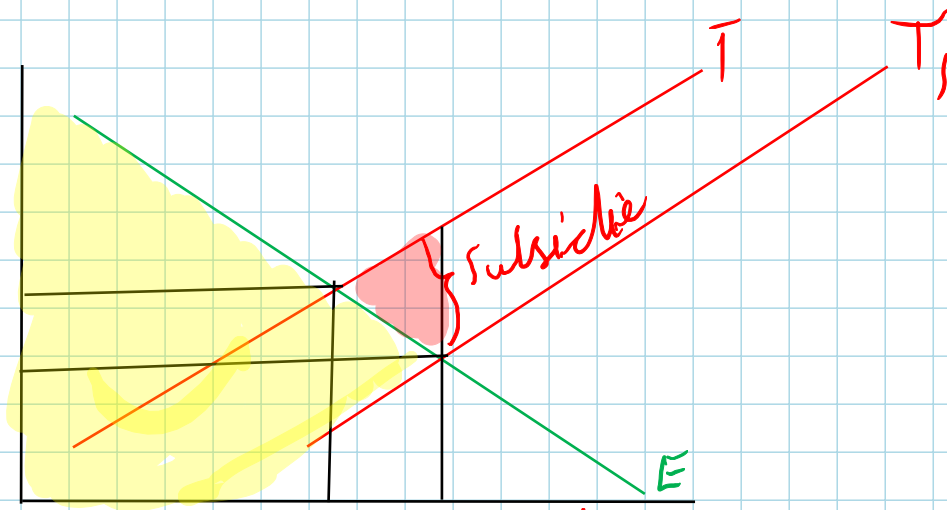
$$\frac{1000}{20} = \frac{20p}{20}$$

$$50 = p$$

$$x = 10 \cdot 50 - 200$$

$$x = 300$$

c) Förhållar effekten på SR vid en subsidie till konsumenterna



2 år i månader
Svar fra oppg. a)

$$\frac{3'' \cdot (1+r)^{24}}{3''} = \frac{4320000}{3''}$$

$$(1+r)^{24} = \frac{432}{300}$$

$$\sqrt[24]{(1+r)^{24}} = \sqrt[24]{\frac{36}{25}}$$

$$r = \sqrt[24]{\frac{6^2}{5^2}} - 1$$

$$r = \frac{6^{\frac{2}{24}}}{5^{\frac{2}{24}}} - 1$$

$$r = \frac{6^{\frac{1}{12}}}{5^{\frac{1}{12}}} - 1 \quad \left. \vphantom{\frac{6^{\frac{1}{12}}}{5^{\frac{1}{12}}}} \right\} \text{ kalkulator}$$

$$3'' = 3 \cdot 10^6$$

Prøvet å løse
for r

Standard funktion for prosentvis vekt

$$V = V_0 - (1 + r)^t$$

$$t = 24 \text{ måneder}$$

$$V_0 = 3'000'000$$

$$V = 4'320'000$$

$$r = \text{Ukjent}$$

Fyklar inn data

$$\overbrace{4'320'000}^V = \overbrace{3'000'000}^{V_0} \cdot (1 + r)^{\overbrace{24}^t}$$

Prøver å få r alene

1) eller på 3'000'000 på begge sider

$$\frac{4'320'000}{3'000'000} = \frac{\cancel{3'000'000}}{\cancel{3'000'000}} \cdot (1 + r)^{24}$$

Utløsing

$$\frac{4'320'000}{3'000'000} = \frac{36}{25}$$

$$\frac{36}{25} = (1 + r)^{24}$$

For å fjerne opptrykk i 24 år jeg 24
roten av begge sider

$$\sqrt[24]{\frac{36}{25}} = \sqrt[24]{(1+r)^{24}}$$

$$\sqrt[24]{\frac{36}{25}} = (1+r)^{\cancel{24} \frac{1}{24}}$$

Med samme ting

$$\sqrt[24]{\frac{36}{25}} = \frac{36^{\frac{1}{24}}}{25^{\frac{1}{24}}}$$

$$36 = 6^2$$

$$25 = 5^2$$

$$\frac{(6^2)^{\frac{1}{24}}}{(5^2)^{\frac{1}{24}}} = \frac{6^{\frac{2}{24}}}{5^{\frac{2}{24}}} = \frac{6^{\frac{1}{12}}}{5^{\frac{1}{12}}} = \left(\frac{6}{5}\right)^{\frac{1}{12}}$$

$$\left(\frac{6}{5}\right)^{\frac{1}{12}} = 1 + r \quad | - 1$$

$$\left(\frac{6}{5}\right)^{\frac{1}{12}} - 1 = r \quad \left. \vphantom{\left(\frac{6}{5}\right)^{\frac{1}{12}} - 1} \right\} \text{Kalkulator}$$

$$r \approx 0,015389$$

