

## Question #69579, Economics / Microeconomics

Hi i have tried many textbooks and online resources but cannot find the solution to the following revision questions, your help will be greatly appreciated.

1) If the supply equation is given as  $Q = -200 + 10p$  and the price of supply changes from R40 to R50. Using the arc elasticity of supply what is the price of elasticity of supply?

Answer:

$$P=40 \quad Q=-200+10*40=200$$

$$P=50 \quad Q=-200+10*50=300$$

$$E_s^p = \frac{\frac{Q_2 - Q_1}{\left(\frac{Q_1 + Q_2}{2}\right)}}{\frac{P_2 - P_1}{\left(\frac{P_1 + P_2}{2}\right)}} = \frac{\frac{300 - 200}{\left(\frac{200 + 300}{2}\right)}}{\frac{50 - 40}{\left(\frac{40 + 50}{2}\right)}} = \frac{0,4}{0,22} = 1,81$$

Answer provided by <https://www.AssignmentExpert.com>