



Worksheet 5: Price elasticity of demand (PED) and total revenue (TR)

- 1 A 20 per cent increase in prices results in a 10 per cent decrease in quantity demanded. Calculate the PED and explain the effect on TR.

$$\text{PED} = \frac{-10\%}{+20\%} = -0.5\%$$

Effect on TR: *The firm gains 20 per cent more revenue from the increase in prices but loses 10 per cent revenue from the fall in quantity demanded. TR therefore rises by 10 per cent overall.*

- 2 A 5 per cent increase in prices results in a 15 per cent decrease in quantity demanded. Calculate the PED and explain the effect on TR.

$$\text{PED} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

Effect on TR:

- 3 A 16 per cent increase in prices does not change quantity demanded. Calculate the PED and explain the effect on TR.

$$\text{PED} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

Effect on TR:

- 4 A 3 per cent increase in prices results in a 6 per cent decrease in quantity demanded. Calculate the PED and explain the effect on TR.

$$\text{PED} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

Effect on TR:



- 5 A 7.5 per cent decrease in prices results in a 14 per cent increase in quantity demanded. Calculate the PED and explain the effect on TR.

$$\text{PED} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

Effect on TR:

- 6 A 13 per cent increase in prices results in a 13 per cent decrease in quantity demanded. Calculate the PED and explain the effect on TR.

$$\text{PED} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

Effect on TR:

What I've learned:

If a firm with $\text{PED} < 1$ wants to increase its TR, it must _____ prices.

If a firm with $\text{PED} > 1$ wants to increase its TR, it must _____ prices.

If a firm with $\text{PED} = 0$ wants to increase its TR, it must _____ prices.

If a firm with $\text{PED} = -1$ wants to increase its TR, it _____
