**5. Price Elasticity of Demand Mark: /16**

Geri sells conservatory furniture. His best seller is currently a five piece rattan set. Last summer he sold 1 000 sets at £450 per set. This year he has put the price up to £459 per set. Demand fell to 950 sets.

1. What was Geri’s sales revenue last year? /2 marks

Sales Revenue = Quantity Sold x Average Selling Price  
Sales Revenue = 1 000 x £450 = **£450 000**

1. What is
   1. The percentage change in price? /2 mark

(Original Figure – New Figure)/ Original Figure x 100  
= (£450 - £459)/450 x 100  
= 9/450 x 100 = **2%**

* 1. The percentage change in demand? /2 marks

= (1000 – 950)/1000 x100  
= - 50/1000 x 100 = **- 5%**

1. What is Geri’s PED? /2 marks

% in QD = -5 = **-2.5**

% in P 2

1. What is Geri’s sales revenue this year? /2 marks

Sales Revenue = Quantity Sold x Average Selling Price  
Sales Revenue = 950 x £459 = **£436 050**

1. One of Geri’s more luxury sets has a PED of -1.4. It retails at £999. Sales were 300 sets last year. If he lowered the price by 10% what would happen to the revenue? Show your calculations. 6 marks

% in QD = PED

% in P Change in price = £999 x 0.90 = £899.10

Change in quantity demanded with a PED of -1.4   
= -1.4 x 10% = 14% change in quantity demanded  
Change in QD = 300 x 1.14 = 342   
Sales Revenue = New Quantity Sold x New Average Selling Price  
Original Sales Revenue = 300 x £999 = £299 700  
New Sales Revenue = 342 x £899.1 = £307 492.20  
  
£307 492.20 - £299 700 = Sales revenue has increased by **£7 792.20**

What factors influence PED?