

14 The annual cost of energy in 2021 for each of the 350 households in Village A can be modelled by a random variable $\pounds X$

It is given that

$$\sum x = 945\,000$$

$$\sum x^2 = 2\,607\,500\,000$$

14 (a) Calculate the mean of X . **[1 mark]**

14 (b) Calculate the standard deviation of X . **[2 marks]**

14 (c) For households in Village B the annual cost of energy in 2021 has mean $\pounds 3100$ and standard deviation $\pounds 325$

Compare the annual cost of energy in 2021 for households in Village A and Village B.

[2 marks]