**Scatter Graphs Questions**

**1.** **Horses**

 The scatter diagram shows the heights and masses of some horses.

 The scatter diagram also shows a line of best fit.



(a) What does the scatter diagram show about the **relationship** between the height and mass of horses?



1 mark

(b) The **height** of a horse is **163cm**.
Use the line of best fit to estimate the mass of the horse.



.......................... kg

1 mark

(c) A different horse has a **mass of 625kg**.
Use the line of best fit to estimate the height of the horse.



......................... cm

1 mark

**2.** **Correlation**

 Look at these two scatter graphs. They are both drawn using the same scale.



(a) Which scatter graph shows **positive** correlation?

  A  B

 Explain your answer.



1 mark

(b) Which scatter graph shows **stronger** correlation?

  A  B

 Explain your answer.



1 mark

**3.** **Planes**

 The scatter graph shows the maximum number of passengers plotted against the wingspans of some passenger planes.




(a) What type of correlation does the scatter graph show?

 ...................................

1 mark

(b) Draw a **line of best fit** on the scatter graph.

1 mark

(c) Another passenger plane has a **wingspan** of **40 m**. The plane is full of passengers.

 If each passenger takes **20 kg** of bags onto the plane, estimate how much their bags would weigh altogether.



.................. kg

2 marks

**4.** **Rodents (Level 7)**

 The scatter graph shows the average body length and average foot length of different species of rodents.



(a) What does the scatter graph tell you about the **type of correlation** between the body length and foot length for these rodents?



1 mark

(b) Draw a **line of best fit** on the scatter graph.

1 mark

(c) If body length increased by **50 mm**, by approximately how many millimetres would you expect foot length to increase?

 Ring the correct value below.



**2** **7** **15** **50** **275**

1 mark

(d) An animal has a body length of **228 mm**, and foot length of **22 mm**.

 Is this animal likely to be one of these species of rodents?

 Tick (****) Yes or No.



 Yes No 

 Explain your answer.



1 mark