868

868TUTORS

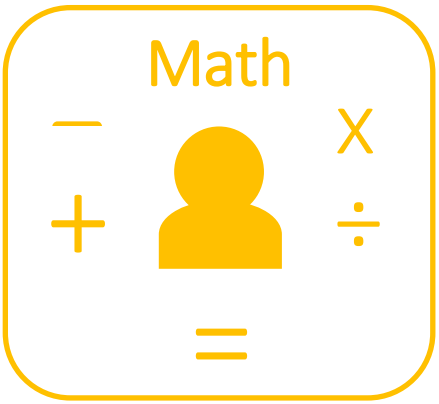
TUTORS

Preparation for

High School Mathematics

Statistics

(Histograms and Line Graphs)



Instructions and Tips:

- ✓ **You have 60 minutes to complete this worksheet**
- ✓ **This worksheet consists of 5 questions**
- ✓ **Write answers in the spaces provided**
- ✓ **All working must be clearly shown**

Student Name: _____

Student ID: _____

Date: _ _ / _ _ / _ _ _ _

Total Score:

Highest Score:

Tutor's Comments:

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Question 1

Twenty-five bags of Cocoa powder are measured on a scale. The mass of each bag is recorded to the nearest kilogram as shown in the table below:

2	35	6	22	6
4	42	5	26	14
13	7	47	19	32
50	20	43	14	34
49	9	41	13	38

(a) Complete the frequency table below for the given data.

Mass (kg)	Tally	Number of bags
1 - 10		
11 - 20		
21 - 30		
31 - 40		
41 -50		

(b) State the lower class boundary for the class interval 11 - 20.

_____

(c) State the class width for the class interval 11 – 20.

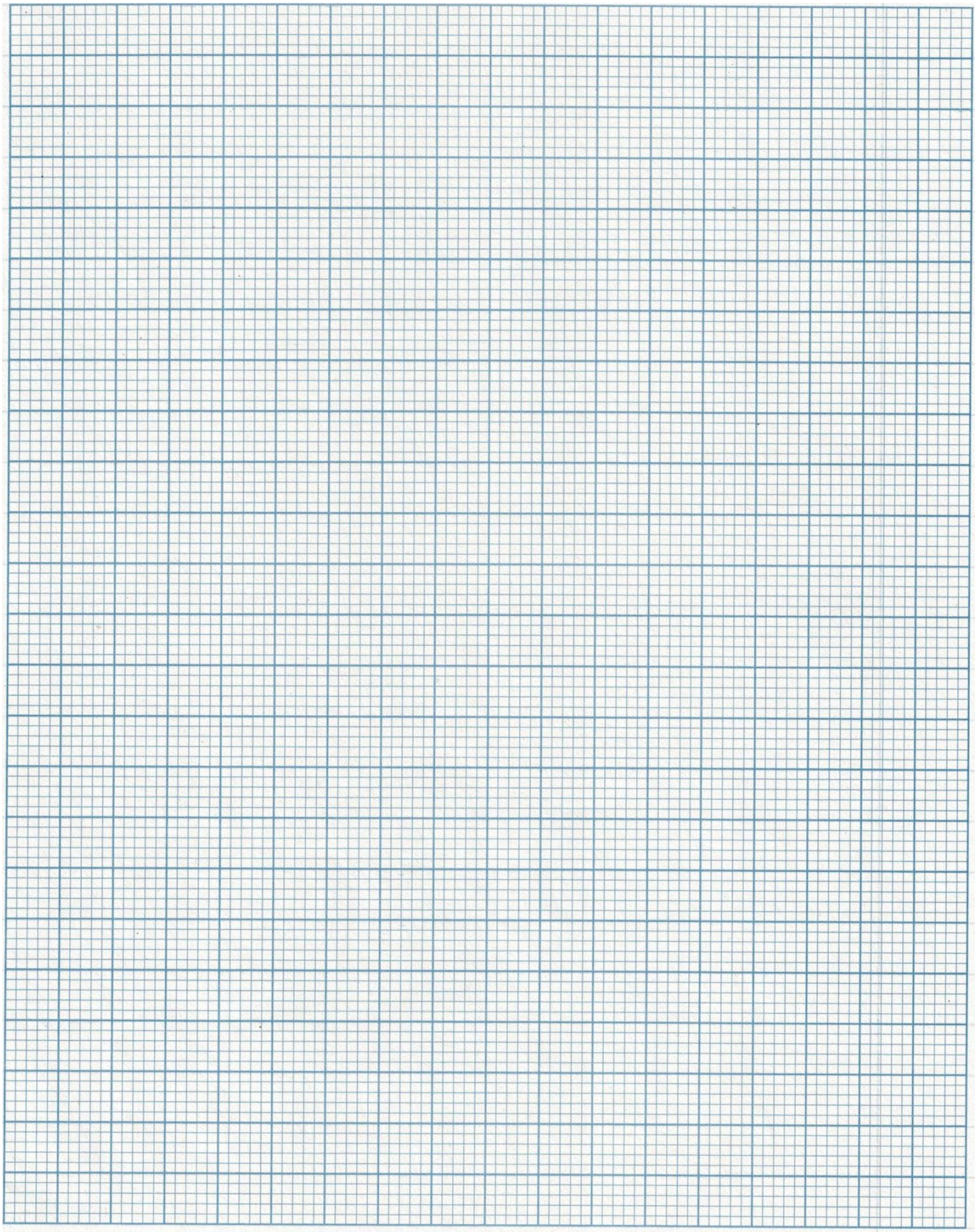
_____

(d) State the class midpoint for the class interval 11 – 20.

_____ **(3 marks)**

(e) On the graph paper on the next page, draw a histogram to represent the data contained in the frequency table above. Use appropriate scales (Kilograms on the x–axis and bags on the y–axis).

(6 marks)



Question 2

Twenty different peppers from across the Caribbean were classified in terms of their heat units. Their heat to the nearest unit was recorded as shown:

100	3,800	1,800	300
900	1,300	1,700	400
2,500	4,000	110	3,900
3,500	3,600	1,600	3,500
1,200	3,900	3,100	3,050

(a) Complete the frequency table below for the given data.

Heat Unit	Tally	Number of peppers
1 - 1000		
1001 - 2000		
2001 - 3000		
3001 - 4000		

(b) State the lower class boundary for the class interval 1001 - 2000.

_____

(c) State the class width for the class interval 1001 – 2000.

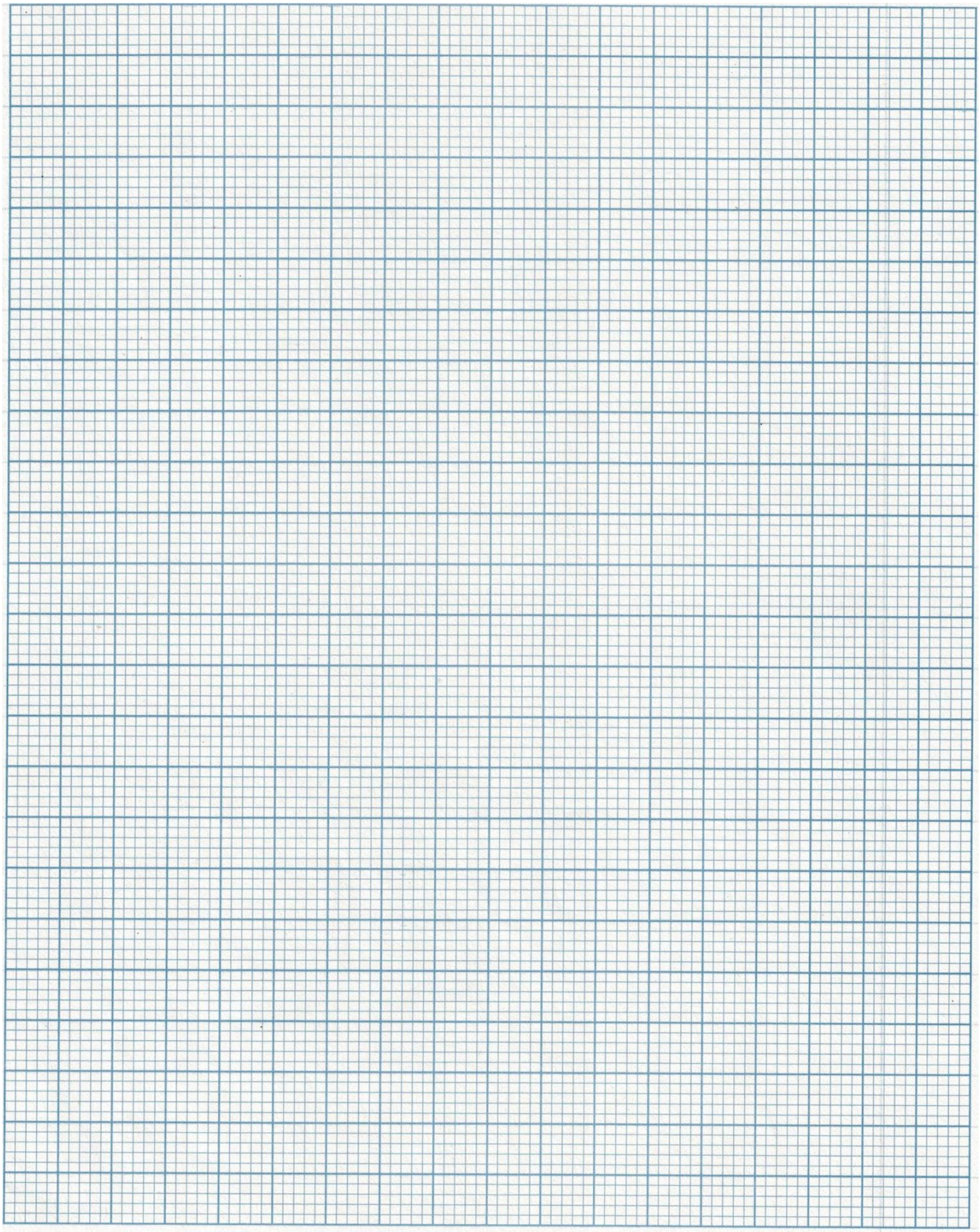
_____

(d) State the class midpoint for the class interval 1001 – 2000.

_____ **(3 marks)**

(e) On the graph paper on the next page, draw a histogram to represent the data contained in the frequency table above. Use appropriate scales (heat units on the x–axis and peppers on the y–axis).

(6 marks)



Question 3

Twenty bags of coconut milk powder are weighed. The mass of each bag to the nearest kilogram is recorded as shown:

8	9	16	28
19	48	18	9
15	32	14	50
13	34	39	15
21	7	17	1

(a) Complete the frequency table below for the given data.

Mass (kg)	Tally	Number of bags
1 – 10		
11 – 20		
21 – 30		
31 – 40		
41 – 50		

(b) State the lower class boundary for the class interval 31 – 40.

_____

(c) State the class width for the class interval 31 – 40.

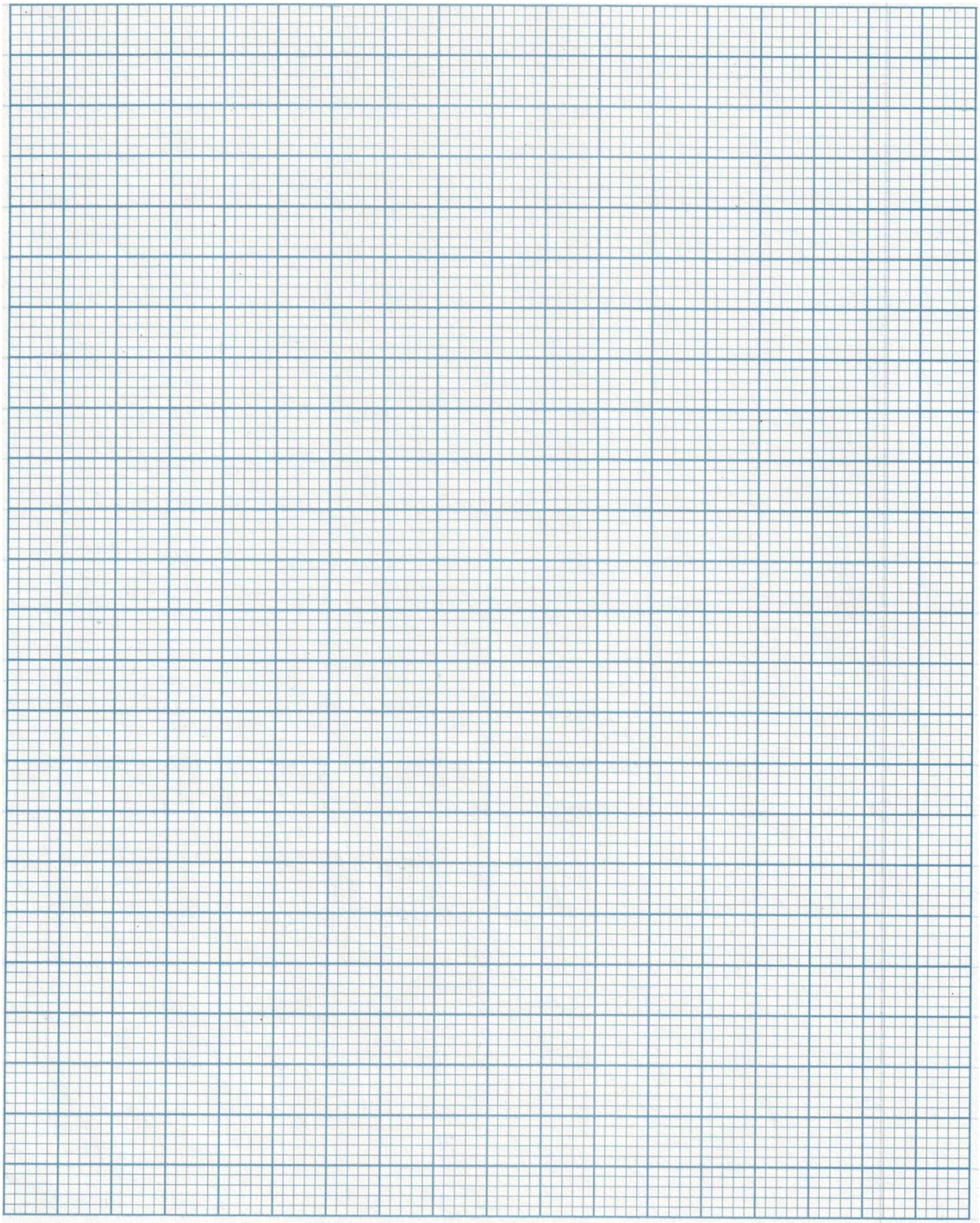
_____

(d) State the class midpoint for the class interval 31 – 40.

_____ **(3 marks)**

(e) On the graph paper on the next page, draw a histogram to represent the data contained in the frequency table above. Use appropriate scales (kilograms on the x–axis and bags on the y–axis.

(6 marks)

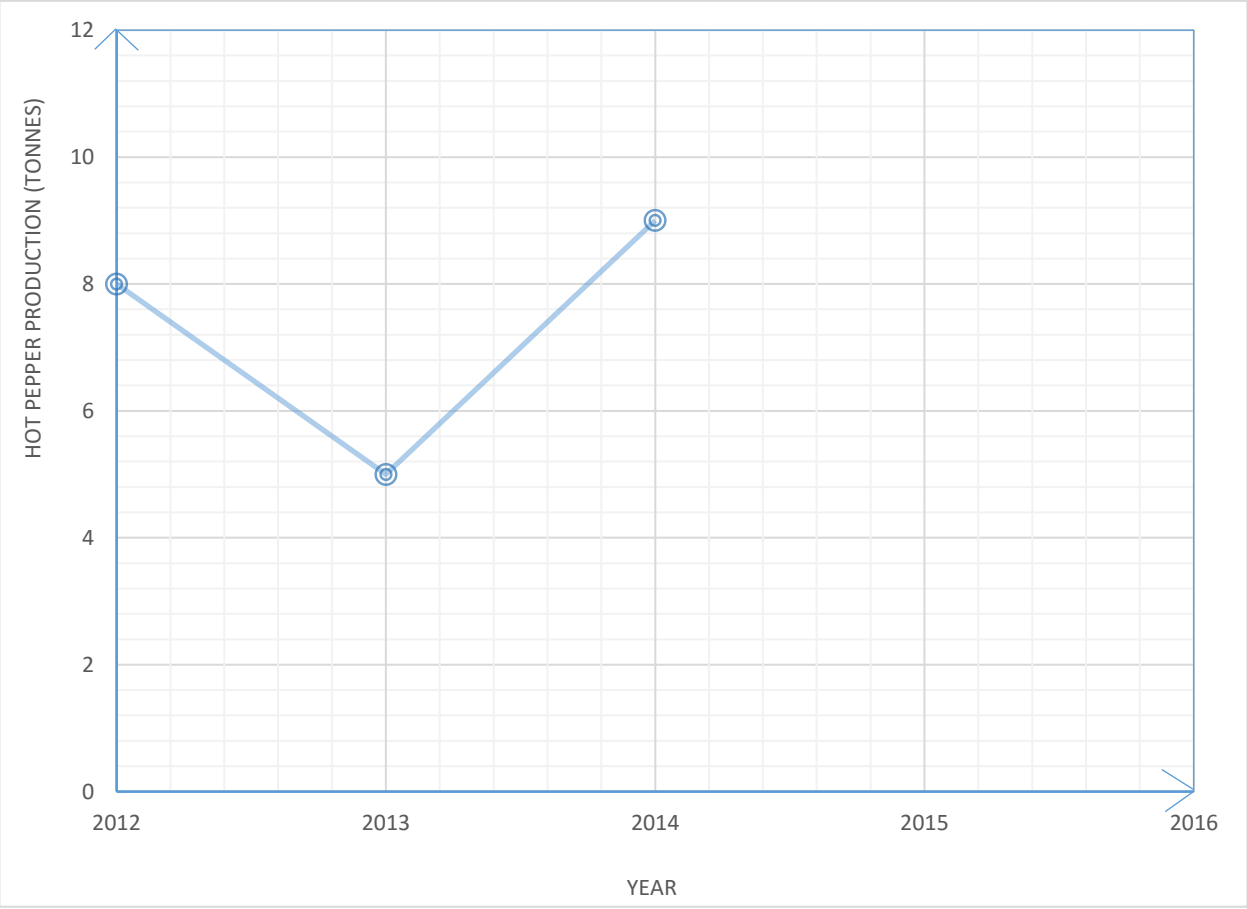


Question 4

The table below shows the quantity of hot peppers produced by a farm, in tonnes, from 2012 to 2016.

Year	2012	2013	2014	2015	2016
Hot pepper production (Tonnes)	8	5	9	10	12

(a) Complete the line graph below to represent the given information.



(2 marks)

(b) Between which two consecutive years was there the greatest increase in hot peppers produced?

_____ **and** _____

(c) What was the total number of hot peppers sold in the five year period from 2012 to 2016?

_____

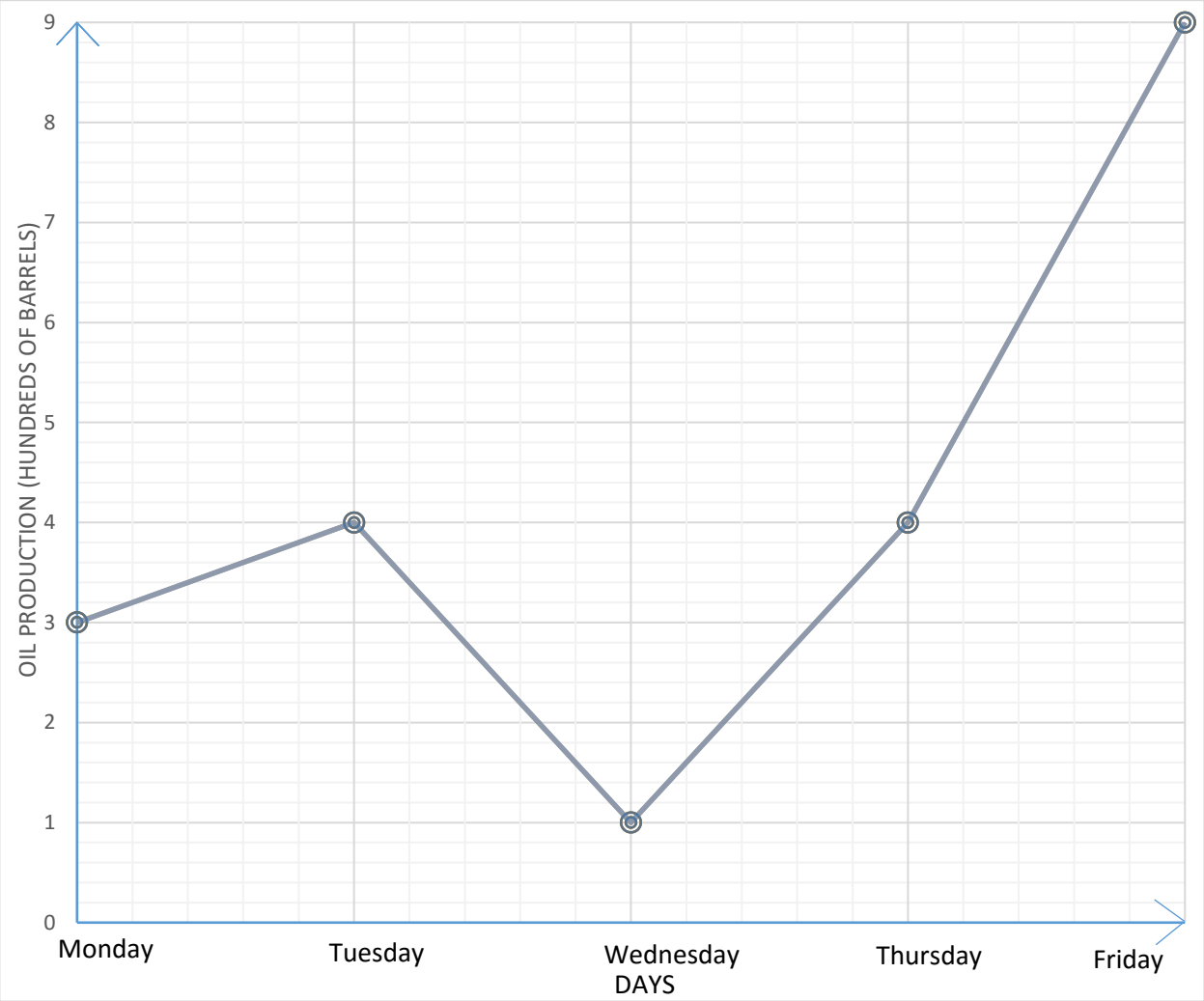
(3 marks)

(d) The mean yearly hot pepper production from 2011 to 2016 was 10 tonnes. How many hot peppers were produced in 2011?

(3 marks)

Question 5

The line graph below shows the daily production of a private oil producer, in hundreds of barrels over a five day period.



Complete the table to show the daily oil production.

Day	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Oil production (Hundreds of barrels)	**3**			**4**	

(3 marks)

(a) Between which two consecutive days was there the greatest increase in oil production?

_____ **and** _____

(b) What is the total oil production for the five day period, Monday to Friday?

_____ **barrels**

(c) Calculate the mean daily oil production for the five day period from Monday to Friday.

_____ **barrels**

(4 marks)

END OF WORKSHEET

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