12.1 DATA COLLECTION, ORGANIZATION AND REPRESENTATION PROCESS AND INTERPRETATION OF DATA REPRESENTATION

A Mark / for statistical questions and mark X if not.

a) How long is the lifespan of a laptop battery	
b) What is your cat's name?	
c) B How many books are read by Form 1 Amanah in one year	

B State the appropriate data collection method. (Match)

a) The time taken for a printing machine to print 1000 Mathematics modules.	Eksperimen
b) What factors are required for seed germination?	Interviews
c) Choice of food that Malaysians prefer	Observation
d) Net income of the whole house for the residents of Taman Mesra	Survey

Notes
- Categorical data is data that cannot be measured numerically but can be parsed and classified according to characteristics.
- Numerical data is data used to measure quantities numerically

C Write the answer in the following data words according to the correct classification.

i)

Numeric Data	Category Data

The level of education of teachers at SMK Bandar Baru Sungai Long ➡

Daily temperature in Selangor ➡

Citizens working in Ice Cream Factory ➡

ii) State whether the following data are categorical or numerical data categories.

Choose the correct answer.

i) The mass of the student of 1 Bestari   Category Data   Numeric Data

ii) Time of Jannah study   Category Data   Numeric Data

iii) Classification of vertebrate animals   Category Data   Numeric Data

LIVEWORKSHEETS

D Choose the type of representation correctly.

Frequency	Data	Stem and Leaf Plots

Discrete Data	Line Graph	Tally	Numeric Data

E Construct each data representation below.

a	The data show the grades obtained by a group of students for the subject of Science. **(Fill in the blanks below)**

D	A	A	C	D	C	E	C	B	A	B	B
B	D	E	C	D	C	D	C	D	D	C	D

Grade	Frequency
A	
B	
C	
D	
E	

b	The bar chart below shows the number of students by blood group.

(Fill in the blanks below)

Kumpulan Darah Murid
Blood Group of Students

Blood group	Frequency
A	
B	
AB	
O	

c	The horizontal bar chart shows the profit earned by Tok Aki over a period

of 5 years.   (Fill in the blanks below)

Keuntungan Hasil Jualan
Sales Profit

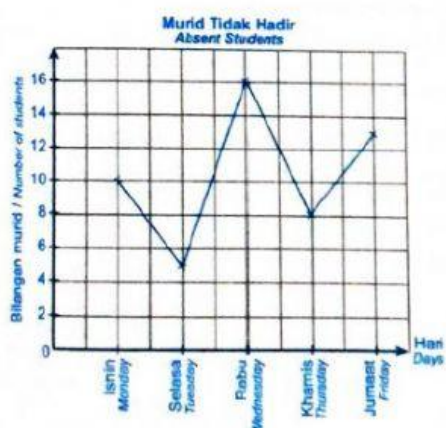| Year	Profit (RM)
2013	
2014	
2015	
2016	
2017	

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d The paired bar chart below shows the scores for groups A, B, C and D by gender in a Geography quiz.   (Fill in the blanks below)
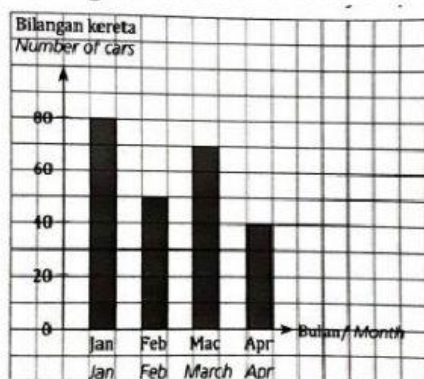
Skor Kumpulan
Group Scores

Group	A	B	C	D
Mal				
Female				

e	**The line graph below shows the number of Form 2 students who did not attend school in one week.**

Day	Monday	Tuesday	Wednedsay	Thursday	Friday
Number of student					

F Solve.
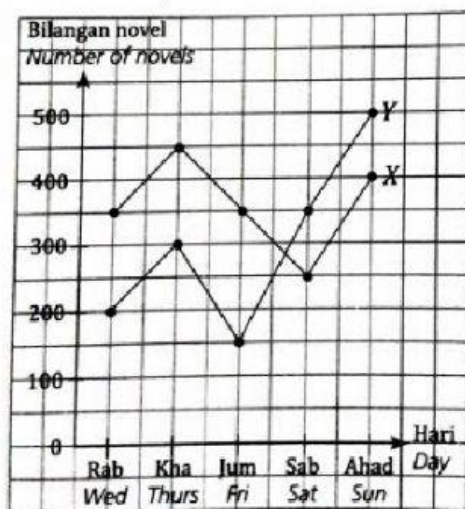
a) **The following bar chart shows the number of cars sold from January to April.**

i)   Find the total number of cars sold in the 4 months.

[blue box]
_____

ii)   If 80 % of the cars sold are Malaysian -made cars, find the number of Malaysian - made cars sold in the 4 months

[orange box]
_____

b) The following line graph shows the number of novels sold by 2 publishing companies, X and Y in five days.

i)   Find the ratio of the number of novels sold by publishing company X to publishing company Y in the 5 days. (Write the ratio without the distance. Example 2: 3)

[yellow box]
_____

ii)   If the profit of publishing company X for the sale of a novel is RM 1.50 and the profit of company Y for the sale of a novel is RM 1.30, calculate the difference in profit between the two companies over a period of five days.

RM [grey box]
_____

c) The following pie chart shows the content of a type of food.
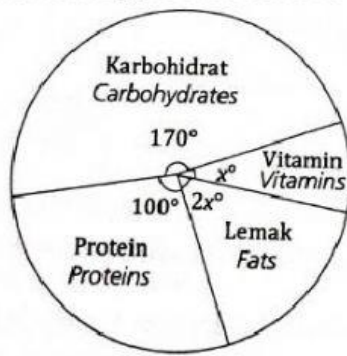
i) Find the value of x.

_____

ii) Calculate the percentage of fat.

[%]
_____ (2 decimal places)

iii) Given that the food contains 15 g of vitamins, calculate the total mass, in g, the food.

[g]
_____