Unit #16 Graphs   Section B : Pie charts
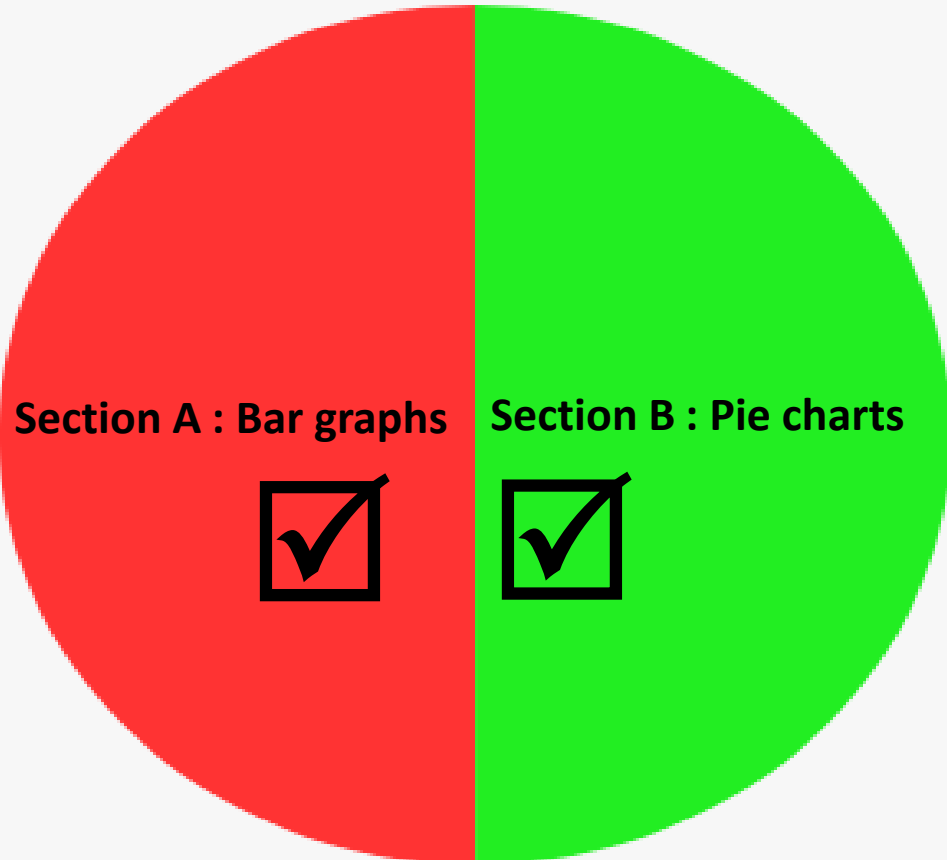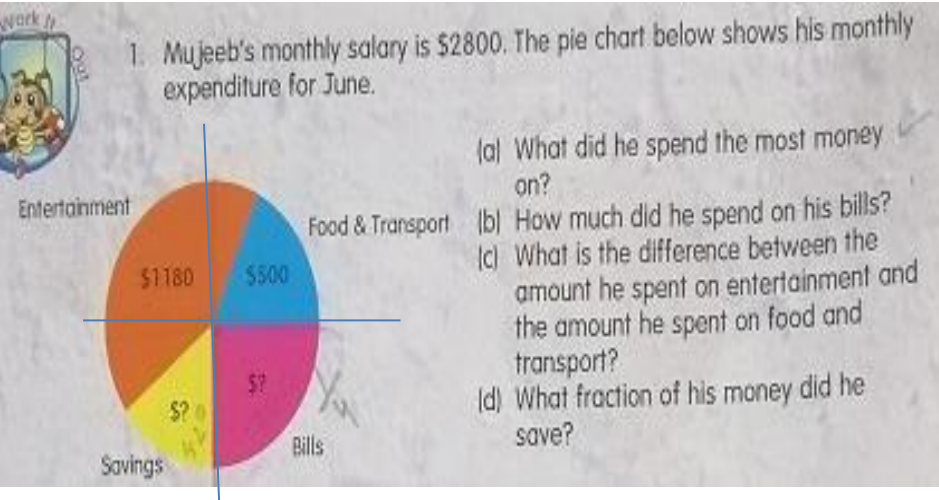
Section A : Bar graphs   Section B : Pie charts
☑   ☑

Answers of the given home work
(Do the text book problems in your notebook)

Text book page : 128

Activity book page : 116 & 117

Please check your answers and correct the wrong ones

Refer T.B pg:128Q.No:1

1. Mujeeb's monthly salary is $2800. The pie chart below shows his monthly expenditure for June.

(a) What did he spend the most money on?
(b) How much did he spend on his bills?
(c) What is the difference between the amount he spent on entertainment and the amount he spent on food and transport?
(d) What fraction of his money did he save?

Entertainment $1180   Food & Transport $500 $? $? Bills   Savings

a) On entertainment $1180

b)That slice shows1/4 of the circle.
So ¼ of total amount he spent on bills

¼ x 2800 = $\dfrac{2800}{4}$ 2800 ÷ 4 = $700

```
      7 0 0
4   2 8 0 0
   -2 8
      0 0
      - 0
      0 0
       - 0
         0
```

c)Entertainment =1180   Food & Transport =500
Difference amount = 1180 − 500 = $680

d)   Savings = Total amount − Expenses
= 2800 − (1180 + 500 + 700)
savings = 2800 − 2380 = $420

Fraction of money saved = $\dfrac{420}{2800}$ **=** $\dfrac{3}{20}$

$\dfrac{420}{2800} = \dfrac{42}{280} = \dfrac{6}{40} = \dfrac{3}{20}$

```
  1 1 8 0
-   5 0 0
    6 8 0
```

```
  1 1 8 0
    7 0 0
+   5 0 0
  2 3 8 0
```

```
  2 8 0 0
- 2 3 8 0
    4 2 0
```

Refer T.B pg:128Q.No:2

2. The pupils in a class were asked to write the name of their favourite outdoor sport. The pie chart below represents their choices.

Athletics 20%

Swimming 20%

7%

5%

Hockey

Basketball

(a) What percent of the class liked basketball?
(b) What fraction of the class liked swimming?
(c) If there were 22 pupils who chose basketball, how many pupils were there in the class altogether?

a)100% -- (20% + 20% + 5%) = 100% - 45% =55%

b)20% = $\frac{20}{100}$ = $\frac{10}{50}$ = $\frac{1}{5}$

```
  1 0 0
-   4 5
  5 5
```

```
    4 5
x   2 2
    9 0
+ 9 0 0
  9 9 0
```

```
    1   8
5 ) 9   0
  --5   ↓
    4   0
  - 4   0
    0   0
```

c)

%	No.of pupils
55	22
45	?

55 x ? = 45 x 22

? = $\frac{45 \times 22}{55}$ = $\frac{990}{55}$ = $\frac{90}{5}$ =18 pupils

```
  2 2
+ 1 8
  4 0
```

Total pupils in the class = 22 + 18 =40 pupils

Refer A.B pg:116

1. 80 pupils were asked to indicate their favourite type of food. The result of the survey is shown in the pie chart below.

Italian 12

Chinese ?

French 10
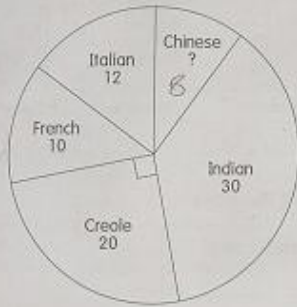
Indian 30

Creole 20

(a) What was the favourite food of the 80 pupils?

(b) What fraction of the pupils preferred Creole food?

(c) What percentage of the pupils preferred Italian food?

(d) How many pupils liked Chinese food?

a) Indian food

b)
$$\frac{20}{80} = \frac{1}{4}$$

c)
$$\frac{12}{80} \times 100 = \frac{1200}{80} = \frac{120}{8} = 15\%$$

d) 80 − (30 + 20 + 10 + 12)
80 -- 72 = 8
8 pupils liked Chinese food.

Refer A.B pg:117

2. The pie chart below shows how Shoaib spent his time last Saturday.

Treasure hunting 17%

Others 8%

Sleeping 25%

Research 34%

Help in Café 8%

Learn to fly plane ?

(a) What did Shoaib spend most of his time on?

(b) How much time did Shoaib spend on research?

(c) What fraction of the time did Shoaib spend helping in the café?

(d) Shoaib decides to stop learning to fly a plane and use the time, instead, to help in café. What percent of the time does he spend helping in the café now?

a) Shohaib spent most of his time on research – 34%

b) $\dfrac{34}{100}$ X 24 hrs = $\dfrac{816}{100}$ = 8.16 hrs

c) $\dfrac{8}{100}$ x 24 hrs = $\dfrac{192}{100}$ = $\dfrac{96}{50}$ = $\dfrac{48}{25}$ hrs

d) % of time spent in café before = 8 %
% of time spent to learn to fly = 8%

= 100 % --(34 + 8 + 17 + 25 + 8)
= 100 % -- 92 % = 8 %

Time spent in café now = 8 % + 8 % = 16 %