



Constructing pie charts.

Example 1

A man spends his money as follows: $\frac{1}{4}$ on food, $\frac{1}{3}$ on rent and $\frac{5}{12}$ on others.
Use the information above and draw a pie chart.

Change the fraction to degrees

The sector for food $\longrightarrow \frac{1}{4} \times \frac{360}{4} = 90^\circ$

The sector for rent $\longrightarrow \frac{1}{3} \times \frac{360}{3} = 120^\circ$

The sector for others $\longrightarrow \frac{5}{12} \times \frac{360}{12} = 150^\circ$

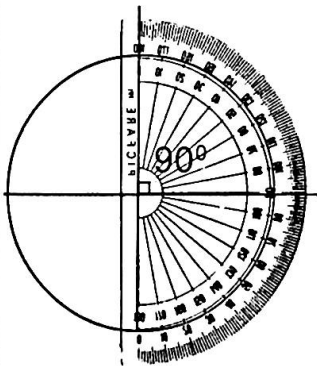
Now use a protractor to measure the angles.

1st Step

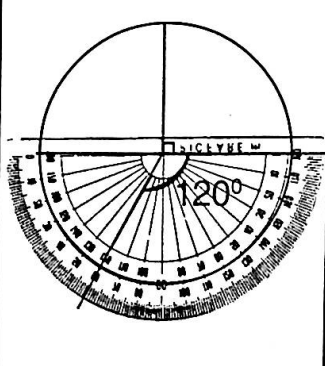
2nd Step

3rd Step

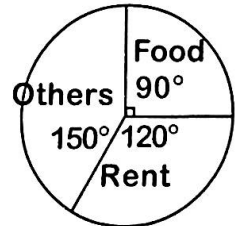
Measure 90°



Measure 120°



The remaining angle is 150°



Note:

- Use the outer scale reading of the protractor.
- Count degrees in clockwise direction from the initial side to the terminal side of the angle you want to measure.

Exercise 8:14 Attempt the following:

1. Oketcho divided his piece of land among his 4 children as follows:
Andrew got $\frac{1}{9}$ of the land, James got $\frac{2}{9}$ of it, Patricia got $\frac{4}{9}$ and Mike got $\frac{2}{9}$.
Use the above information and draw a pie chart.
2. On a farm, $\frac{1}{10}$ of the animals are goats, $\frac{1}{5}$ are sheep, $\frac{2}{5}$ are cattle and $\frac{3}{10}$ are chicken. Use the information to draw a pie chart.
3. $\frac{1}{12}$ of a doctor's salary is spent on school fees; $\frac{4}{12}$ on rent, $\frac{1}{3}$ on food and $\frac{1}{4}$ on clothing. Use the information to draw a pie chart.