



7

DATA ANALYSIS

Include:

- (a) reading and interpreting pie charts.
- (b) solving 1-step problems using information presented in pie charts.

Exclude:

- (a) use of degrees for calculation.

MCQs

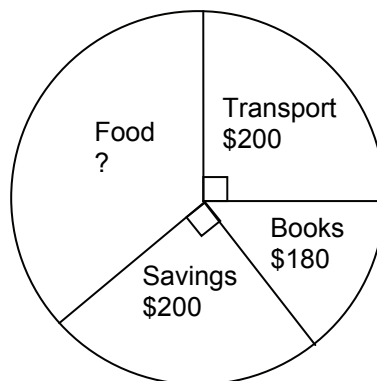
1. The pie chart below shows the places of interest visited by 1836 pupils this year. If the same number of pupils visited Sentosa, Night Safari and Bird Park, how many pupils went to Sentosa this year?



- (A) 306
(B) 459
(C) 612
(D) 918



2. The pie chart below shows how Tommy spent his money. What percentage of his money did he spend on food?

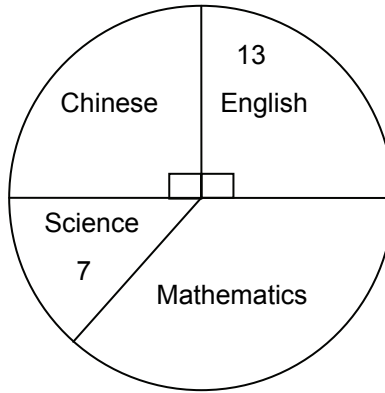


- (A) 20%
(B) 27.5%
(C) 55.5%
(D) 50%





3. The pie chart below shows the favourite subjects of pupils in a class.

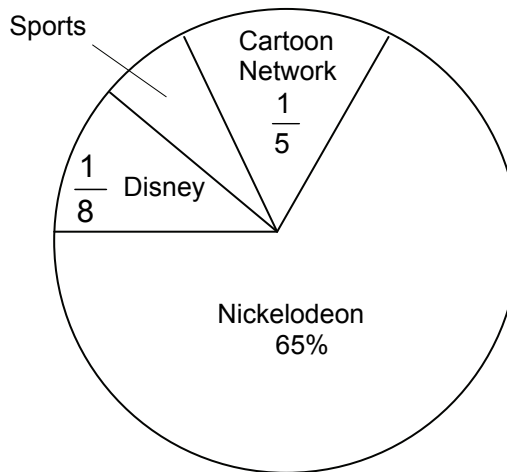


Mathematics is the favourite subject of _____ pupils.

- (A) 19
- (B) 20
- (C) 26
- (D) 33



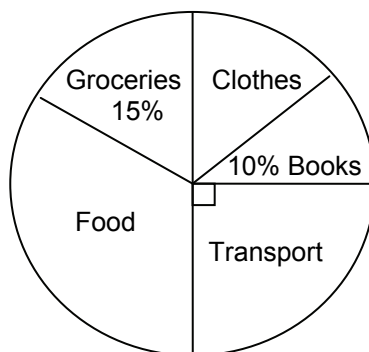
4. The pie chart shows the favourite television channel of students in a class. What percentage of the students in the class chooses Sports as their favourite channel?



- (A) 2.5%
- (B) 12.5%
- (C) 20%
- (D) 35%



5. The pie chart below shows how Mr Tan spent his monthly salary.

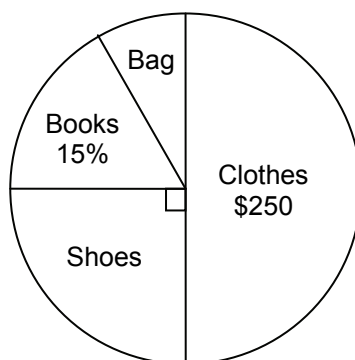


What fraction of his money was spent on transport?

- (A) $\frac{1}{2}$
 (B) $\frac{1}{4}$
 (C) $\frac{1}{6}$
 (D) $\frac{1}{8}$



6. The pie chart below shows the amount of money Derrick spent on various things.



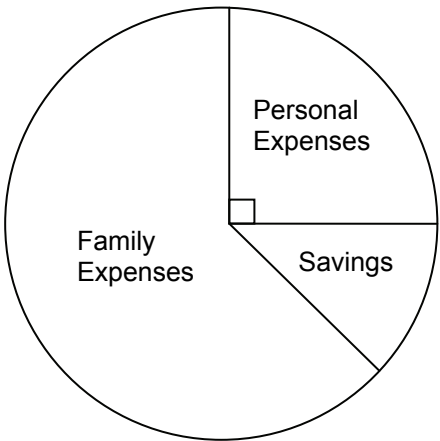
How much money did he spend on the bag?

- (A) \$ 37.50
 (B) \$ 50
 (C) \$ 75
 (D) \$ 125





7. The pie chart below shows how Mr Lim spends his monthly salary. He saves 12.5 % of his monthly salary.

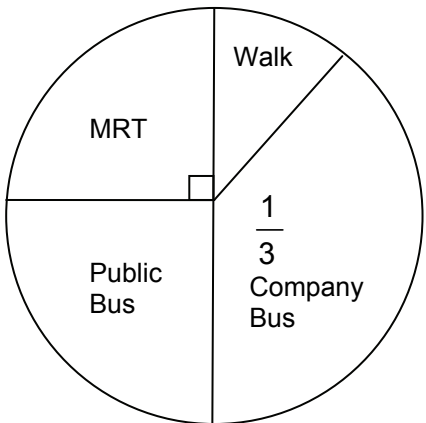


What percentage of his salary does he spend on his family?

- (A) 87.5 %
- (B) 72.5 %
- (C) 62.5 %
- (D) 25.0 %



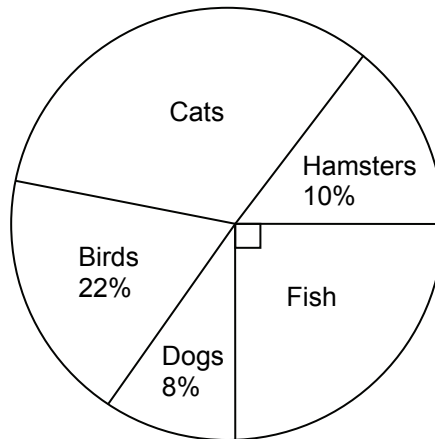
8. The pie chart below shows the different ways a group of 180 factory workers go to work. Find the number of workers who walk to work.



- (A) 30
- (B) 60
- (C) 90
- (D) 120



9. The pie chart below shows the different types of animals in a pet shop.



If there are 20 more cats than hamsters, how many animals are there in the pet shop altogether?

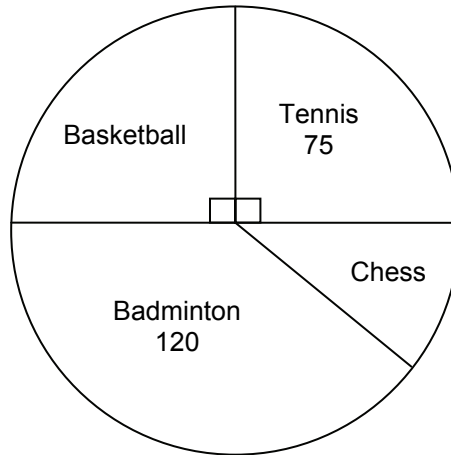
- (A) 35
- (B) 50
- (C) 80
- (D) 700





Questions

10. The pie chart below shows the number of members of four co-curricular activities in a school.

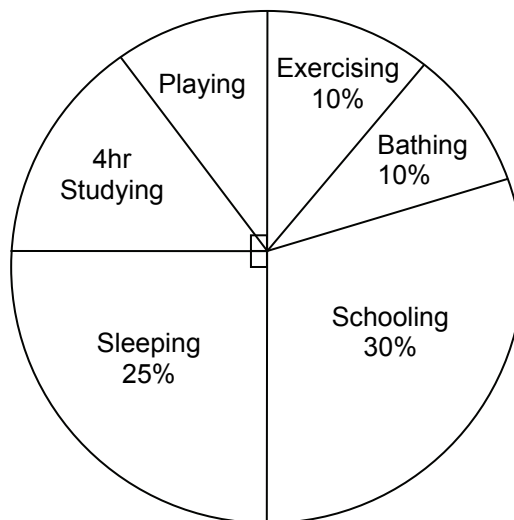


- (a) Find the ratio of the number of the chess club members to the number of the tennis club members. Express your answer in the lowest term.
- (b) Express the number of badminton members as a percentage of the number of basketball members.



11. The pie chart below shows how Jonathan spent his time on a particular day.

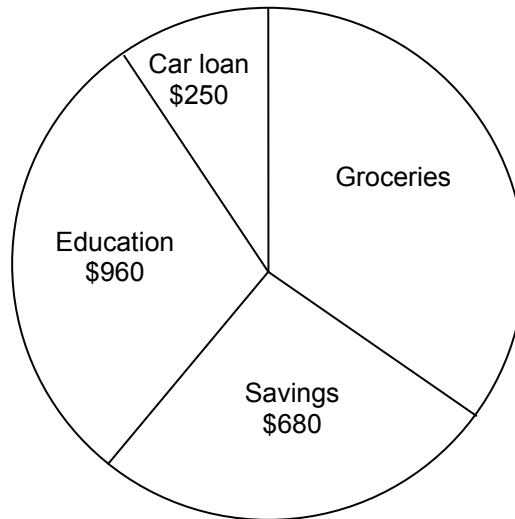
Time Spent in a Day



How many hours did he spend playing?



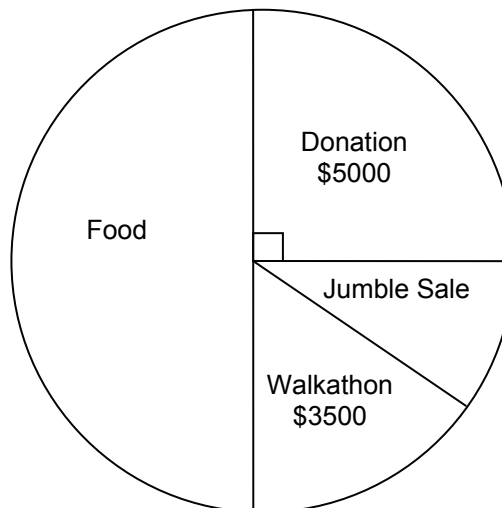
12. The pie chart below shows the expenditure of Mrs Wong's monthly salary.



If Mrs Wong spent $\frac{1}{3}$ of her monthly salary on groceries, how much was her monthly salary?

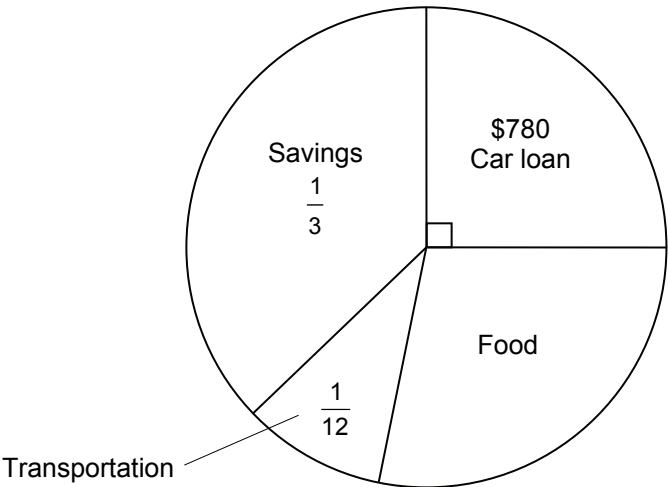


13. In the pie chart above, half of the money collected was from the sales of food. What percentage of the amount collected was from the jumble sale?





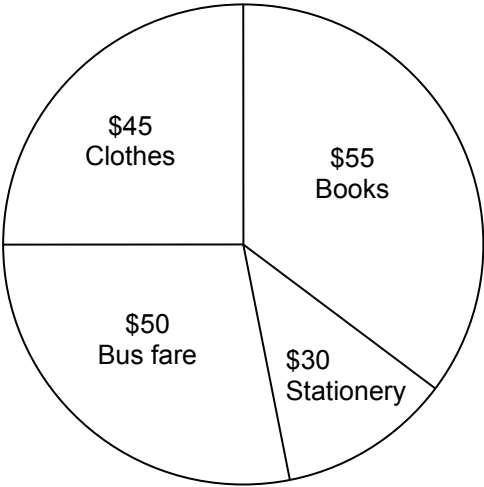
14. The pie chart below shows the amount of money that Tommy spent in a month.



How much did Tommy spend for food?



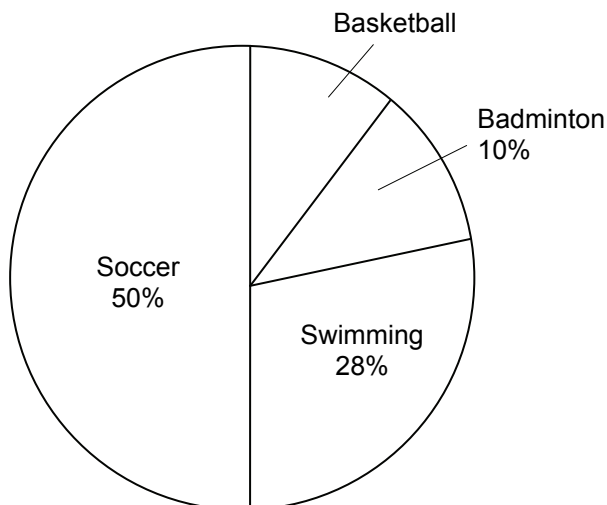
15. The pie chart below shows how Ming spent a monthly allowance his parents had given him.



What percentage of his monthly allowance is spent on bus fare and stationery?
Give your answer in whole number.



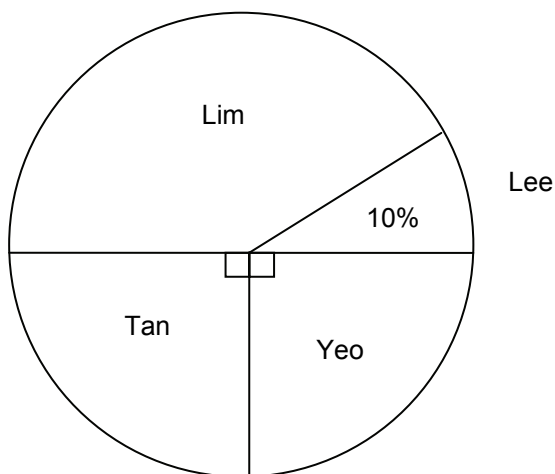
16. The pie chart below shows the number of pupils who like the various sports.



If 300 pupils like soccer, how many pupils like basketball?

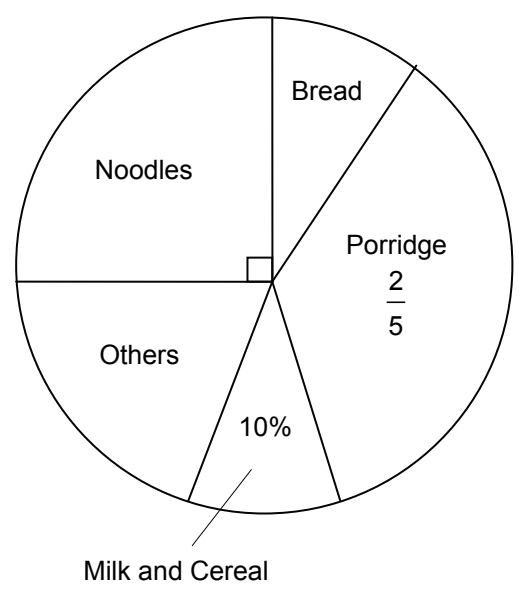


17. The pie chart below shows the amount of money donated by each family. If the amount of money donated by the Yeo family is \$620, what is the amount donated by the Lim family?

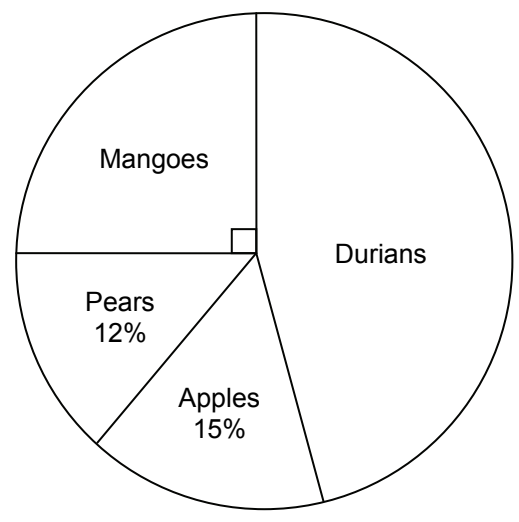




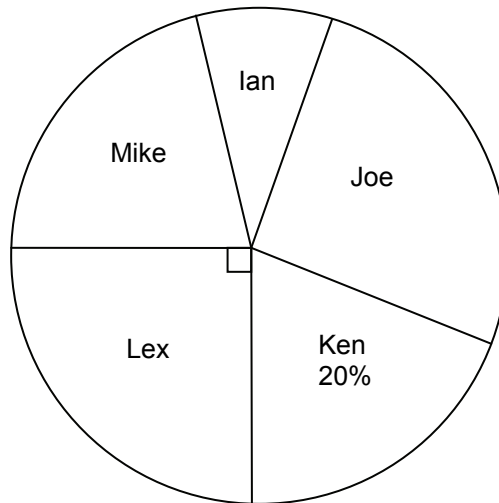
18. The pie chart below shows the choice of preference of breakfast of 400 pupils in a school. How many pupils choose either bread or others for breakfast?



19. The pie chart below shows the different kinds of fruits sold by Uncle Lim. He sold 425 mangoes. How many durians did he sell?



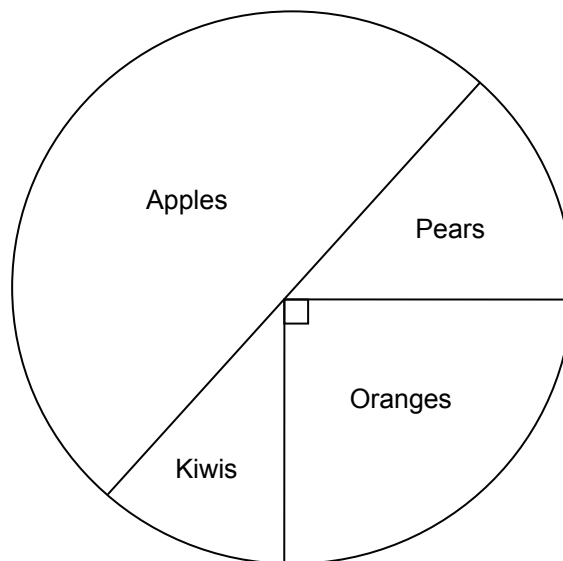
20. The pie chart below shows the amount of money 5 men saved last month.



- (a) If Lex saved \$500, how much did Ken save?
- (b) If the ratio of Mike's savings to Lex's is 9 : 10, how much did Mike save?
- (c) What was the total amount of money by Mike, Ian and Joe?



21. The pie chart below shows the types of fruits at a stall.



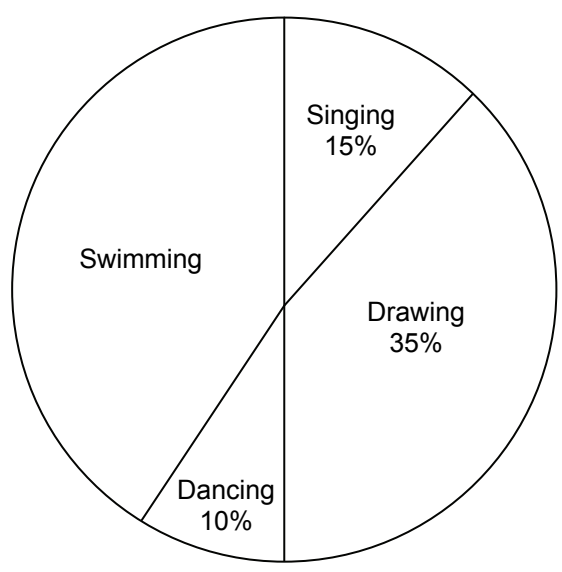
There are 84 oranges and twice as many pears as kiwis.

- (a) What percentage of the fruits are pears?
- (b) If each pear is sold at 45 cents, how much will the fruit seller get from the sale of all the pears?

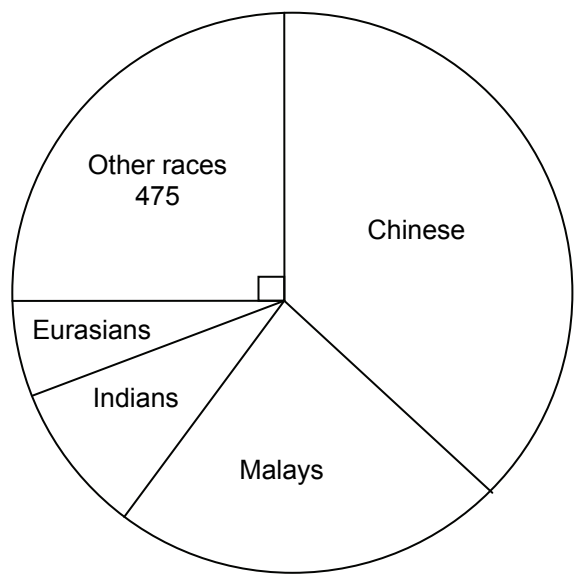




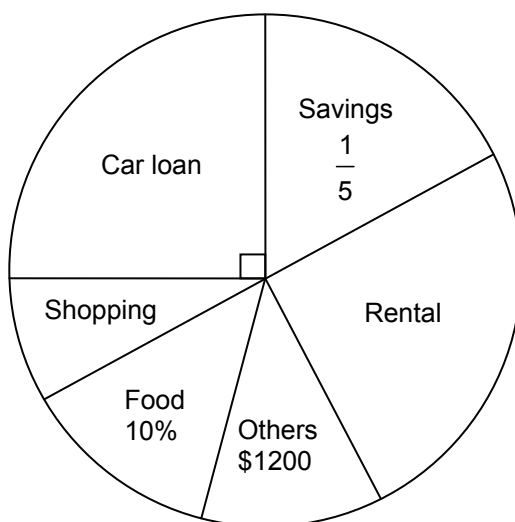
22. The pie chart below shows the different types of enrichment courses in a school. What percentage of the pupils took up swimming?



23. The pie chart below shows the distribution of the various racial groups in a particular neighbourhood. 45% of the population is Chinese. The ratio of the number of Malays to the number of Indians is 6 : 1. If there are twice as many Indians as Eurasians, what is the population of Malays in this neighbourhood?



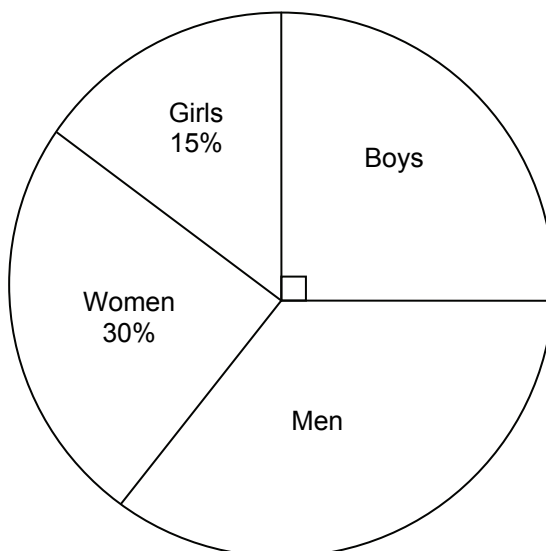
24. The pie chart below shows how Mr and Mrs Tay used their combined monthly income. They spent half of their combined monthly income on Rental, Food and Others.



- (a) If Mr and Mrs Tay spent \$ 600 on shopping each month, what is their combined monthly income?
- (b) How much did they spend on food each month?
- (c) What percentage of their monthly income was spent on their rental?

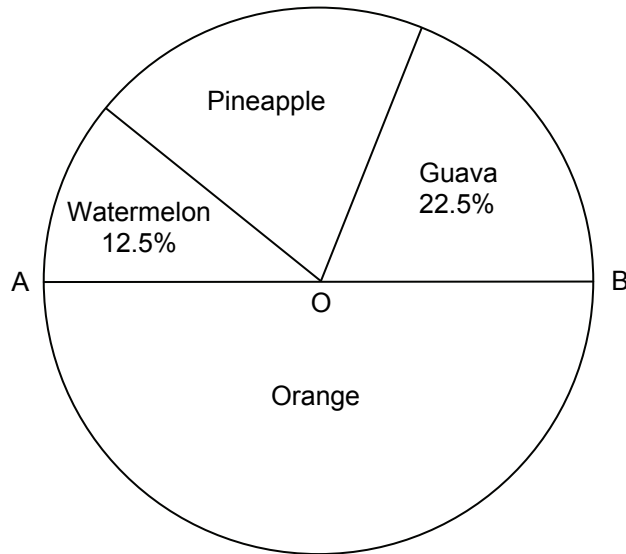


25. The pie chart below shows the percentage of men, women, girls and boys who took part in a sports carnival. What percentage of the total people who took part in the sports carnival were men?





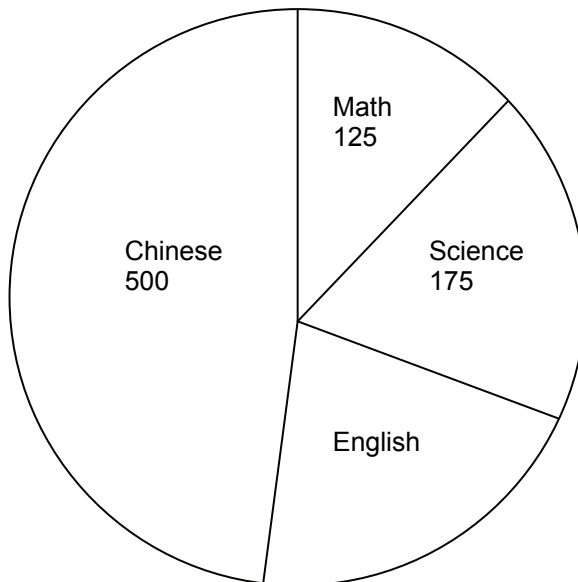
- 26.** The pie chart below shows the favourite drink of a class of pupils. AB is a straight line and O is the centre of the chart.



If 60 pupils chose orange juice, how many pupils chose pineapple juice?



- 27.** A group of Chinese students participated in a survey about their favourite subject. The pie chart below shows the result of the survey.

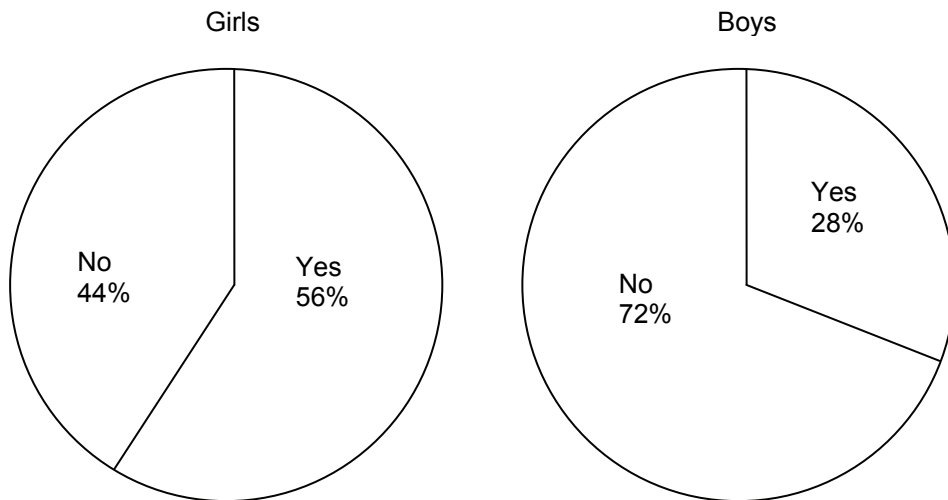


(a) What is the students' favourite subject?

(b) If 20% of the students like English, how many students are there in the group?



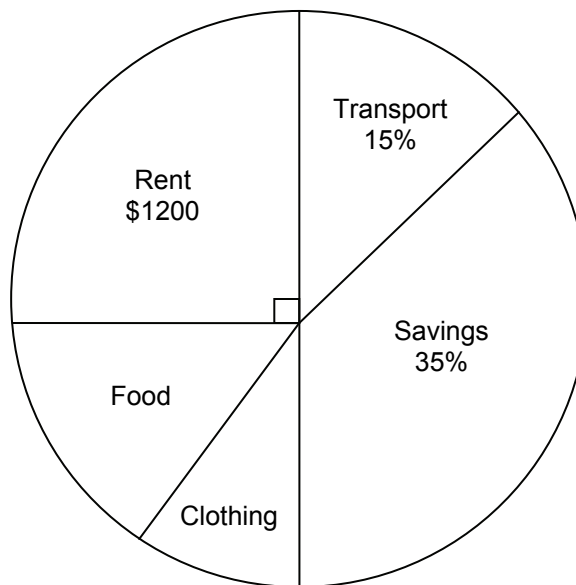
28. The pie charts show the results of a survey conducted with some pupils to find out if there is too much violence in the media. Equal number of boys and girls took part in the survey.



From the survey results, did the pupils think there was too much violence in the media?



29. The graph shows how Amy used her monthly salary in May.

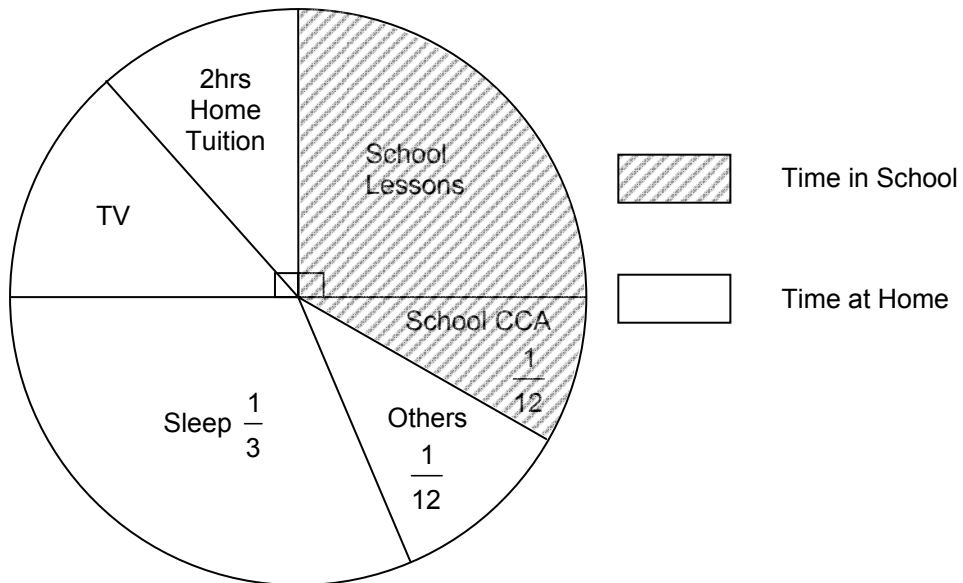


- (a) If the ratio of the amount spent on food to the amount spent on clothing is 5 : 3, how much money did Amy spend on clothing?
- (b) How much money did Amy spend on transport?
- (c) In June, her salary increased by 5%. If she spent the same amount of money in June as in May, what is the percentage of her June savings to her May savings?





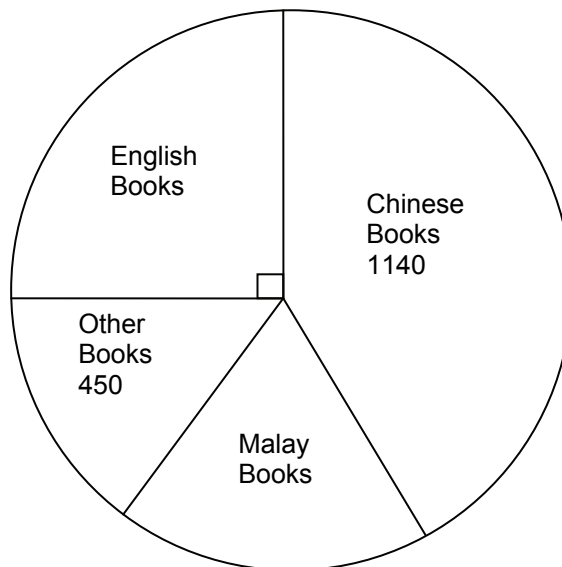
30. The pie chart shows how Steven spent the whole of last Wednesday.



- (a) What fraction of the whole day was spent watching TV? (Express your answer in the simplest form)
- (b) What fraction of the time was spent in school was on CCA? (Express your answer in the simplest form)



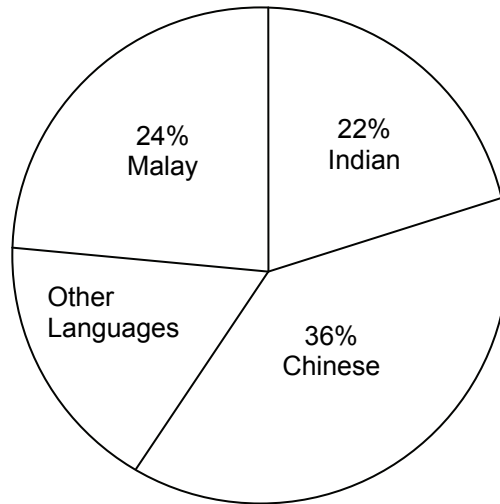
31. The pie chart below shows the types of books in a school library. There are 390 more Chinese books than English books.



- (a) How many English books are there?
- (b) What percentage of the books in the school library are Malay books?



32. The pie chart below shows the result of a survey of 150 pupils on the languages they speak at home.



How many pupils speak other languages at home?





Answer keys:

MCQs

1. A
2. B
3. A
4. A
5. B
6. B
7. C
8. A
9. C

Questions

- 10 (a) 2:5
(b) 160%
11. 2 hours
12. \$2835
13. 30%
14. \$1040
15. 44%
16. 72
17. \$992
18. 100
19. 816
- 20 (a) \$400
(b) \$450
(c) \$1100
- 21 (a) 16.7%
(b) \$25.20
22. 40%
23. 456

- 24 (a) \$12000
(b) \$1200
(c) 30%

25. 30%

26. 18

- 27 (a) Chinese
(b) 1000

28. No

- 29 (a) \$450
(b) \$720
(c) 114%

30 (a) $\frac{1}{6}$

(b) $\frac{1}{3}$

- 31 (a) 750
(b) 22%

32. 27

Notes: