

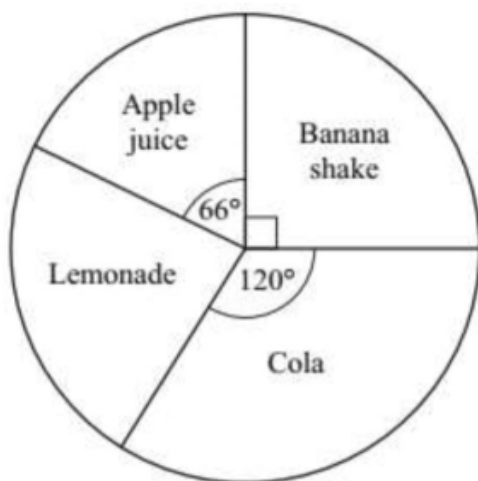


1. The four sector angles in a pie chart are $2x^\circ$, $3x^\circ$, $4x^\circ$ and 90° .

Find the value of x [2]

0580/23/O/N/14 Q4)

2. 60 students recorded their favorite drink.



The results are shown in the pie chart.

(a) Calculate the angle for the sector labeled Lemonade. [1]

(b) Calculate the number of students who chose Banana shake. [1]

0580/22/M/J/11 Q14)

3. 120 students choose what they want to do when they leave school.

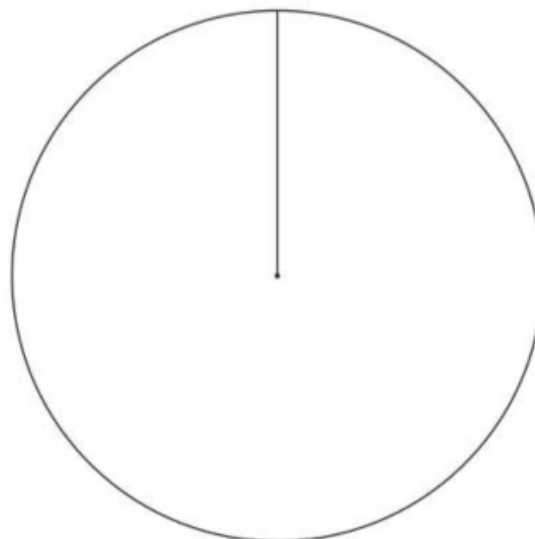
Their choices are shown in the table.

Choice	Number of students
University	57
Training	45
Work	18

Complete the pie chart to show this information.

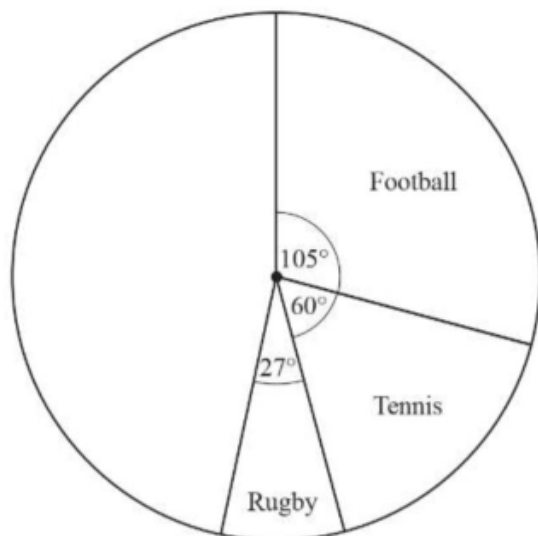
Label each sector clearly. [4]

0580/22/O/N/18 Q18)





4. (a) Jean asks 600 people to choose their favourite sport.
The pie chart shows some of this information



- (i) Show that 100 people choose tennis. [1]
(ii) Work out how many people choose rugby. [2]
(iii) 125 people choose cricket and the rest choose swimming.
Complete the pie chart to show this information. [2]

0580/43/O/N/21 Q8(a)

5. Thibault records the number of cars of each colour in a car park. He draws a pie chart to show this information.

Calculate the sector angle for the red cars. [2]

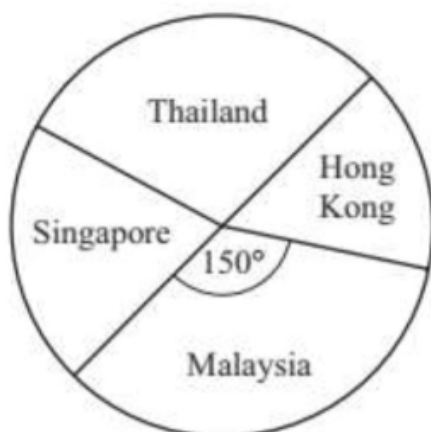
Colour	Black	White	Silver	Red
No of cars	8	5	4	3

0580/22/M/J/22 Q2)



6. A travel brochure has 72 holidays in four different countries.

The pie chart shows this information.



- (a) There are 24 holidays in Thailand.

Show that the sector angle for Thailand is 120° . [2]

- (b) The sector angle for Malaysia is 150° .

The sector angle for Singapore is twice the sector angle for Hong Kong.

Calculate the number of holidays in Hong Kong. [3]

0580/21/M/J/14 Q17

7. Michelle sells ice cream.

The table shows how many of the different flavours she sells in one hour.

Flavour	Vanilla	Strawberry	Chocolate	Mango
Number sold	6	8	9	7

Michelle wants to show this information in a pie chart.

Calculate the sector angle for mango. [2]

0580/23/M/J/14 Q2)

8. Bruce plays a game of golf.

His scores for each of the 18 holes are shown below.

2 3 4 5 4 6 2 3 4

4 5 3 4 3 5 4 4 4

The information is to be shown in a pie chart.

Calculate the sector angle for the score of 4. [2]

0580/22/O/N/13 Q4)



9. 40 people were asked how many times they visited the cinema in one month.

The table shows the results.

Number of cinema visits	0	1	2	3	4	5	6	7
Frequency	5	5	6	6	7	3	6	2

(b) Omar wants to show the information from the table in a pie chart.

Calculate the sector angle for the people who visited the cinema 5 times. [2]

0580/21/M/J/18 Q23

10. In a football league a team is given 3 points for a win, 1 point for a draw and 0 points for a loss. The table shows the 20 results for Athletico Cambridge

Points	3	1	0
Frequency	10	3	7

Thomas wants to draw a pie chart using the information in the table. Calculate the angle of the sector which shows the number of times Athletico Cambridge were given 1 point. [2]

0580/43/M/J/12 Q4(a)(ii)

11. The table shows information about the time, t minutes, taken for each of 150 girls to complete an essay.

Time (t minutes)	$60 < t \leq 65$	$65 < t \leq 70$	$70 < t \leq 80$	$80 < t \leq 100$	$100 < t \leq 150$
Frequency	10	26	34	58	22



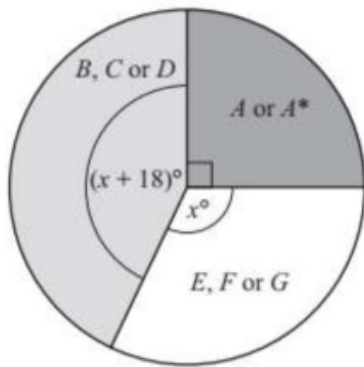
Rafay looks at the frequency table.

He draws a pie chart to show this information.

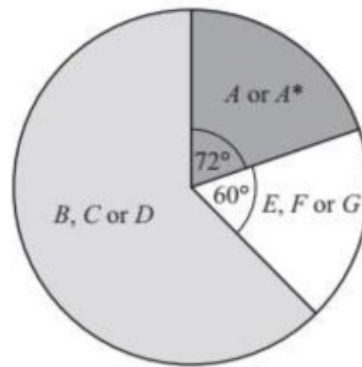
Calculate the sector angle for the interval $65 < t \leq 70$ minutes. [2]

0580/43/O/N/17 Q4(c)(ii)

12. The pie charts show information on the grades achieved in mathematics by the girls and boys at a school.



Girls



Boys

- (a) For the **Girls'** pie chart, calculate
- x , [2]
 - the angle for grades B, C or D. [1]
- (b) Calculate the percentage of the **Boys** who achieved grades E, F or G. [2]
- (c) There were 140 girls and 180 boys.
- Calculate the percentage of students (girls and boys) who achieved grades A or A*. [3]
 - How many more boys than girls achieved grades B, C or D? [2]

0580/41/O/N/12 Q1)

Answers

Q1) 30

Q2) (a) 84 (b) 15

Q3) correct pie chart made from angles 171° , 135° and 54°

Q4) (ii) 45 (iii) 75° angle drawn

Q5) 54

Q6) 6

Q7) 84

Q8) 160

Q9) 27

Q10) 54

Q11) 62.4

Q12) (a) (i) 126 (ii) 144 (b) 16.7 (c) (i) 22.2 (ii) 58