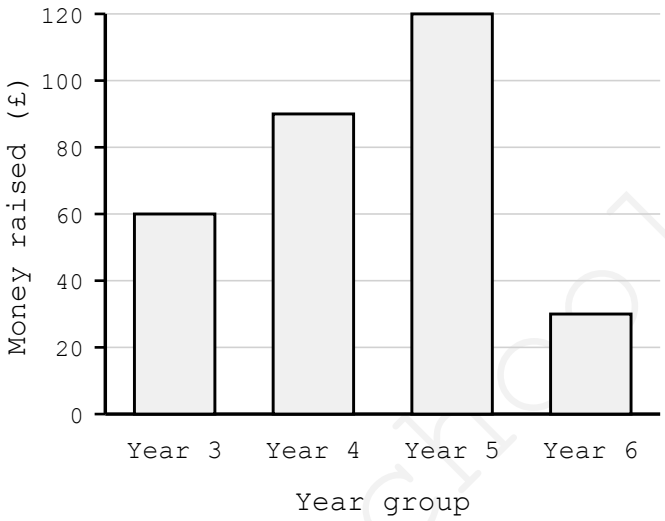
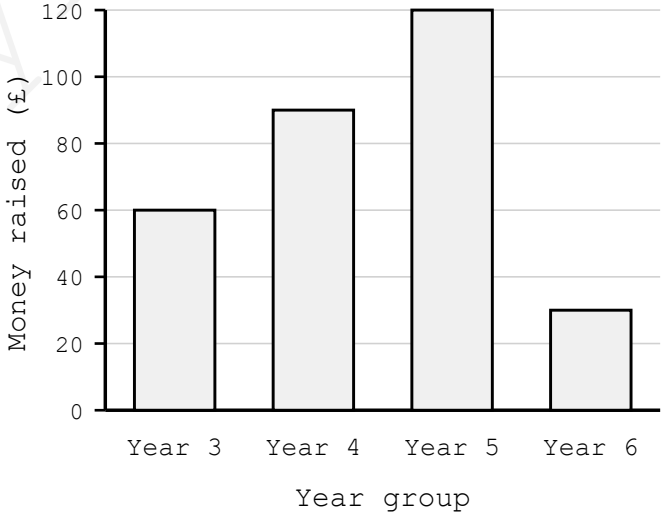
Data Handling & Probability: Hard Practice Paper 3

Q1. The bar chart shows the money each year group raised for charity. What percentage of the total was raised by Year 4?



A. 15% B. 20% C. 25% D. 30% E. 40%

Q2. Use the bar chart. The amount raised by Year 6 is what fraction of the amount raised by Year 5?



A. 1/4 B. 1/3 C. 2/5 D. 1/2 E. 3/4

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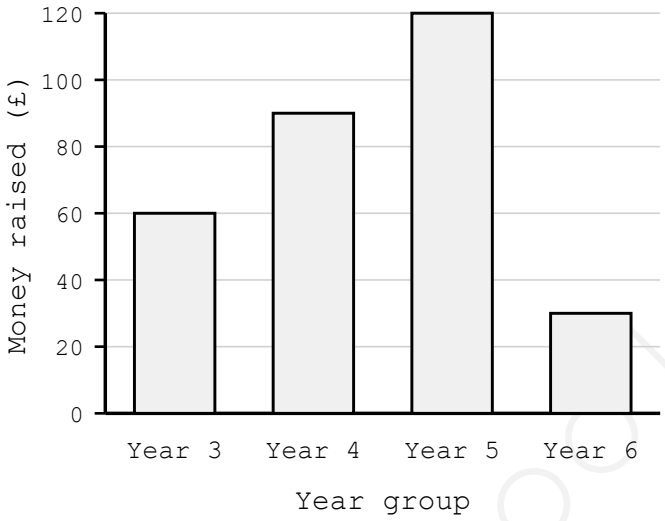
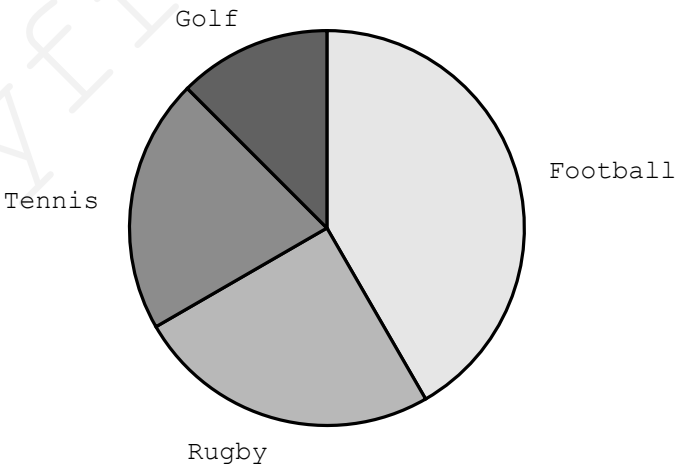
Q3. Use the bar chart. Every £1 raised buys 5 pencils for a school library. How many pencils does all the money raised buy?



A. 600 B. 1200 C. 1500 D. 1800 E. 3000

Q4. The pie chart shows the favourite sport of 480 people. The rugby sector is a right angle. How many people chose rugby?



A. 60 B. 75 C. 90 D. 100 E. 120

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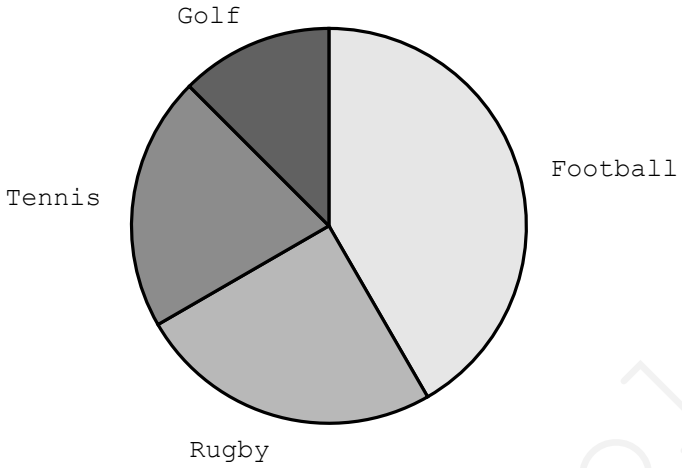
Q5. Use the same pie chart. 60 of the 480 people chose golf. What is the angle of the golf sector?



A. 30° B. 45° C. 60° D. 72° E. 90°

Q6. The mean of eight numbers is 12. The mean of the first five of them is 9. What is the mean of the other three?

A. 13 B. 15 C. 17 D. 19 E. 21

Q7. Five numbers have a median of 12 and a range of 8. The smallest of the five numbers is 8. What is the largest?

A. 16 B. 17 C. 18 D. 20 E. 24

Q8. A fair coin is flipped twice. What is the probability of getting at least one head?

A. 1/4 B. 1/3 C. 1/2 D. 2/3 E. 3/4

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Q9. The two-way table shows how far pupils live from school and how they travel. What percentage of the pupils travel by bus?

Pupils	Under 5 km	5 km or more	Total
Walk	18	2	20
Bus	6	24	30
Total	24	26	50

A. 30% B. 40% C. 50% D. 60% E. 70%

Q10. Use the two-way table. A pupil who lives 5 km or more from school is chosen at random. What is the probability that the pupil walks?

Pupils	Under 5 km	5 km or more	Total
Walk	18	2	20
Bus	6	24	30
Total	24	26	50

A. 1/25 B. 1/13 C. 2/25 D. 1/12 E. 1/5

Q11. In a group of 60 people, 35 like tea and 28 like coffee. 12 people like both. How many like exactly one of the two drinks?

A. 23 B. 31 C. 35 D. 37 E. 39

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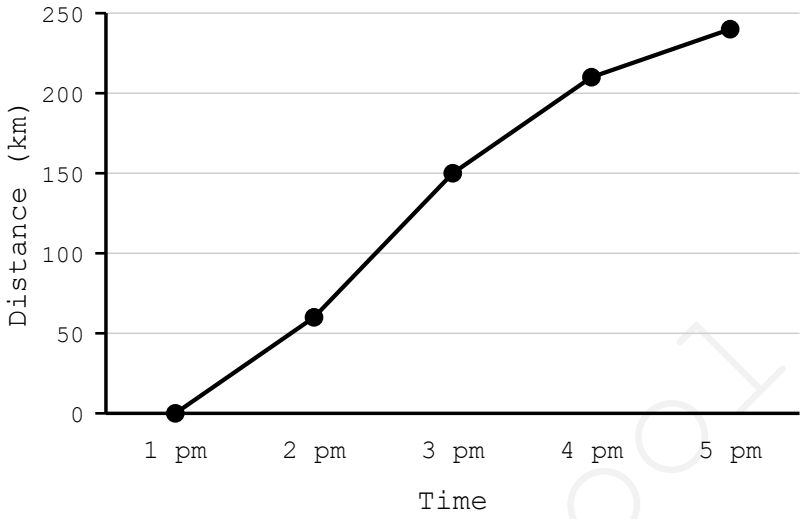
Q12. The line graph shows how far a car had travelled during an afternoon. What was its average speed between 2 pm and 4 pm?



A. 45 km/h B. 60 km/h C. 75 km/h D. 90 km/h E. 105 km/h

Q13. The table shows the goals a team scored in 20 matches. What is the mean number of goals per match?

Goals	Number of matches
0	6
1	8
2	4
3	2

A. 1.1 B. 1.2 C. 1.25 D. 1.5 E. 2

Q14. A bag holds only red and blue counters. The probability of taking a red counter is 2/5. There are 24 blue counters. How many counters are in the bag altogether?

A. 30 B. 40 C. 48 D. 60 E. 72

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Q15. A spinner has only red, blue and green sections. The probability of red is 0.3 and the probability of blue is 0.45. What is the probability of green?

A. 0.15 B. 0.2 C. 0.22 D. 0.25 E. 0.3

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