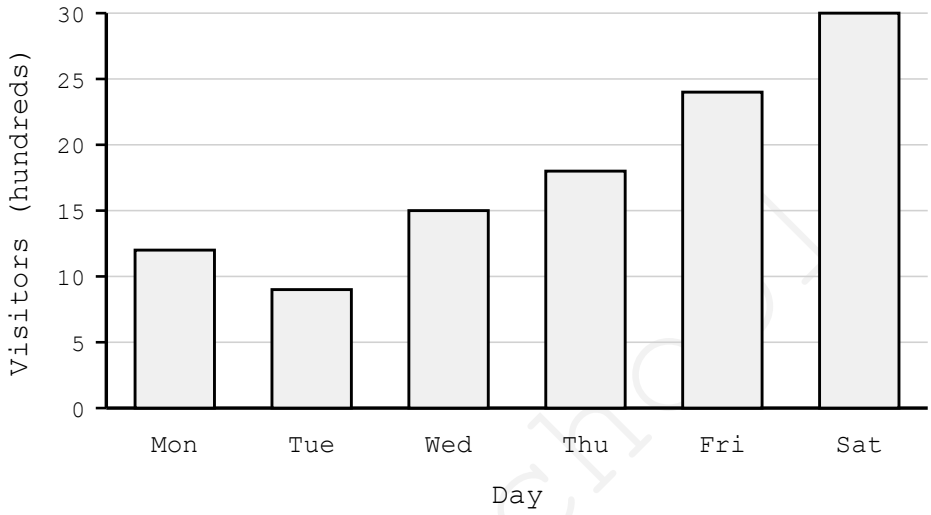
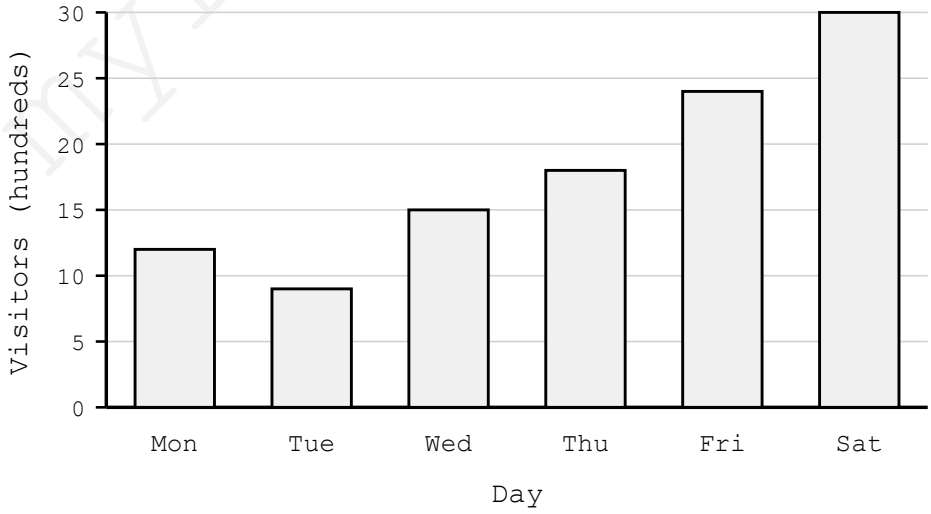
Data Handling & Probability: Hard Practice Paper 4

Q1. The bar chart shows the visitors to a museum, in hundreds. How many visitors came on Friday?



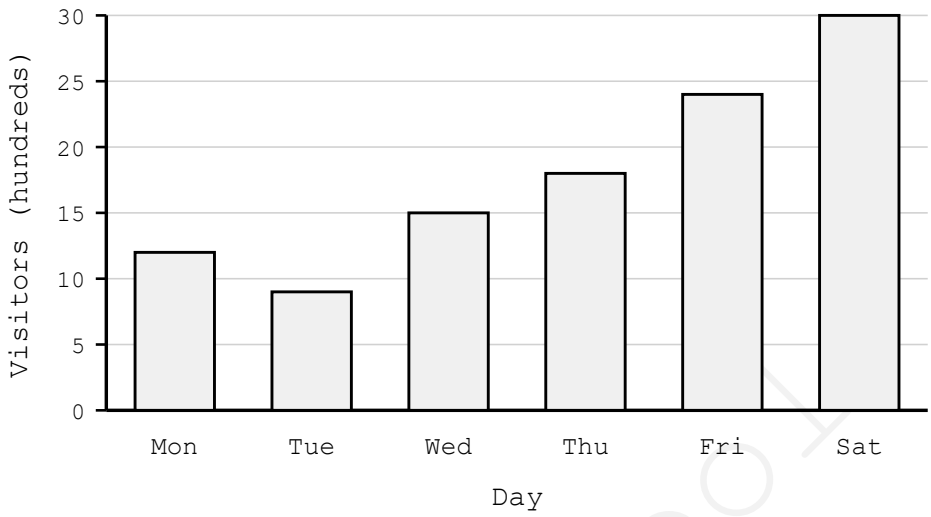
A. 24 B. 240 C. 1800 D. 2000 E. 2400

Q2. Use the bar chart. What is the ratio of Monday's visitors to Thursday's visitors, in its simplest form?



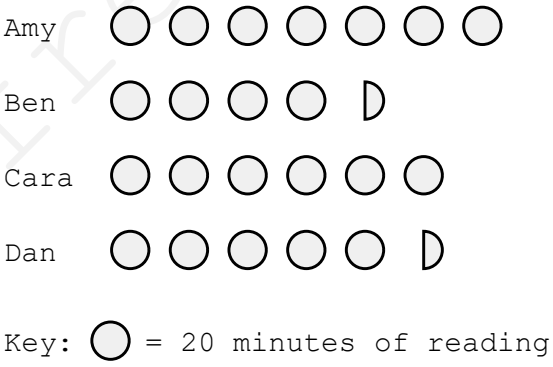
A. 1:2 B. 1:3 C. 2:3 D. 3:4 E. 4:5

Q3. Use the bar chart. How many more visitors came on Saturday than on Tuesday?



A. 210 B. 2100 C. 2200 D. 2900 E. 3900

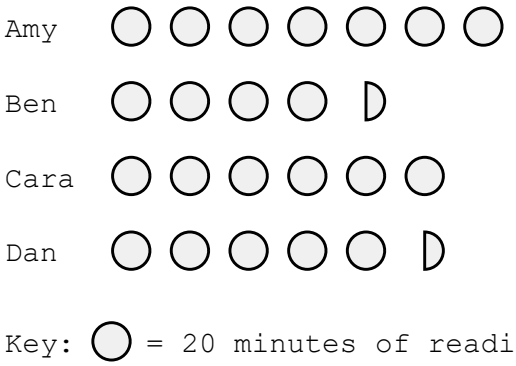
Q4. The pictogram shows how long four pupils read for. How many circles would a pupil who read for 2 hours 20 minutes need?



A. 4 B. 5 C. 6 D. 7 E. 8

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Q5. Use the pictogram. How long did Ben read for?



A. 1 hour 30 minutes

B. 1 hour 40 minutes

C. 1 hour 45 minutes

D. 2 hours

E. 2 hours 15 minutes

Q6. The mean of six numbers is 9. Two of the numbers, 3 and 15, are taken away. What is the mean of the four numbers that are left?

A. 7 B. 7.5 C. 8 D. 9 E. 10

Q7. The mean height of the 24 pupils in a class is 138 cm. A new pupil who is 163 cm tall joins the class. What is the new mean height?

A. 138 B. 138.2 C. 138.5 D. 138.8 E. 139

Q8. A box holds 3 white balls and 5 black balls. Two balls are taken out, one after the other, without being put back. What is the probability that both are black?

A. 1/4 B. 5/14 C. 3/8 D. 2/5 E. 5/8

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Q9. The two-way table shows what people ordered in a café. What fraction of the tea drinkers are children?

People	Tea	Coffee	Total
Adults	72	48	120
Children	56	24	80
Total	128	72	200

A. 1/4 B. 3/8 C. 7/16 D. 1/2 E. 9/16

Q10. Use the two-way table. One of the 200 people is chosen at random. What is the probability that the person is an adult who ordered coffee?

People	Tea	Coffee	Total
Adults	72	48	120
Children	56	24	80
Total	128	72	200

A. 6/25 B. 1/4 C. 2/5 D. 12/25 E. 3/5

Q11. In a survey of 80 people, 45 own a cat and 38 own a dog. 12 people own neither. How many people own both?

A. 9 B. 11 C. 13 D. 15 E. 17

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Q12. The table groups the times pupils took to run 100 metres. How many pupils took less than 18 seconds?

Time (seconds)	Number of pupils
12-14	5
15-17	11
18-20	9
21-23	3

A. 5 B. 11 C. 12 D. 14 E. 16

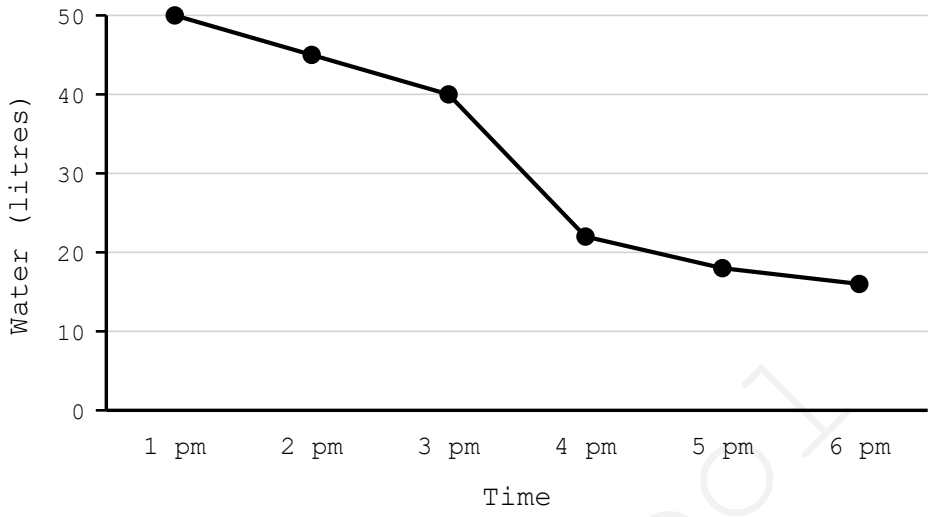
Q13. Use the table of running times. What fraction of the pupils took 21 seconds or more?

Time (seconds)	Number of pupils
12-14	5
15-17	11
18-20	9
21-23	3

A. 3/28 B. 1/9 C. 1/7 D. 5/28 E. 3/14

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Q14. The line graph shows the water in a tank during the afternoon. During which hour did the tank lose water fastest?



A. 1 pm to 2 pm

B. 2 pm to 3 pm

C. 3 pm to 4 pm

D. 4 pm to 5 pm

E. 5 pm to 6 pm

Q15. A biased coin lands on heads with a probability of 0.35. If it is flipped 400 times, how many tails would you expect?

A. 140 B. 260 C. 280 D. 300 E. 340

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