RD SHARMA

Solutions

Class 7 Maths

Chapter 11

Ex   11.6

Q1. Ashu had 24 pages to write. By the evening, he had completed 25% of his work. How many pages were left?

Total number of pages = 24

Number of pages completed = 25% of 24 pages

$= \frac{25}{100} \times 24$

$= \frac{1}{4} \times 24$

= 6 pages

Therefore no of pages left = Total − Pages completed

$= (24 - 6)$ pages

= 18 pages

Q2. A box contains 60 eggs. Out of which $16\frac{2}{3}$ % are rotten ones. How many eggs are rotten?

Total number of eggs = 60

Number of eggs rotten = $16\frac{2}{3}$% of 60 eggs

= 16.66% of 60 eggs

$= \frac{16.66}{100} \times 60$

= 10 eggs

Therefore no of eggs rotten = 10 eggs

Q3. Rohit obtained 45 marks out of 80. What per cent marks did he get?

Total number of marks = 80

Rohit obtained = 45

Required percentage = $\frac{45}{80} \times 100$

$= \frac{9}{16} \times 100$

= 56.25%

Q4. Mr Virmani saves 12% of his salary. If he receives Rs 15900 per month as salary, find his monthly expenditure.

Salary = Rs.15900

Savings = 12% of salary

$= \frac{12}{100} \times 15900$

= Rs.1908

Therefore Expenditures = Salary − Savings

= Rs.15900 − Rs.1908

= Rs.13992

Q5. A lawyer willed his 3 sons Rs 250000 to be divided into portions 30%, 45% and 25%. How much did each of them inherit?

Total amount = Rs.250000

Therefore

30% of amount = $\frac{30}{100} \times 250000$

= 30 × 2500

= Rs.75000

45% of amount = $\frac{45}{100} \times 250000$

= 45 × 2500

= Rs.112500

25% of amount = $\frac{25}{100} \times 250000$

= 25 × 2500

= Rs.62500

Therefore portions of amounts are Rs.75000, Rs.112500 and Rs.62500

Q6. Rajdhani College has 2400 students, 40% of whom are girls. How many boys are there in the college?

Total number of students = 2400

40% of 2400 = $\frac{40}{100} \times 2400$

= 40 × 24

= 960girls

Therefore no of boys = Total students − girls

= 2400 − 960

= 1440 boys

Q7. Aman obtained 410 marks out of 500 in CBSE XII examination while his brother Anish gets 536 marks out of 600 in IX class examination. Find whose performance is better?

Aman scored 410 marks out of 500

= $\frac{410}{500} \times 100$

= 82%

Anish scored 536 marks out of 600

= $\frac{536}{600} \times 100$

= 89%

Anish performance is better

Q8. Rahim obtained 60 marks out of 75 in Mathematics. Find the percentage of marks obtained by Rahim in Mathematics.

Total no of marks = 75

Rahim obtained = 60

Required percentage = $\frac{60}{75} \times 100$

= 80%

Q9. In an orchard, $16\frac{2}{3}$ % of the trees are apple trees. If the number of trees in the orchard is 240, 3 find the number of other type of trees in the orchard.

Total number of trees = 240

Apple trees = $16\frac{2}{3} \times 240$

= 16.66% of 240

= $\frac{16.66}{100} \times 240$

= 40 trees

No of trees other than apple tree = Total trees − apples trees

= 240 − 40

= 40 trees

Q10. Ram scored 553 marks out of 700 and Gita scored 486 marks out of 600 in science. Whose performance is better?

Ram obtained 553 out of 700

Ram percentage = $\frac{553}{700} \times 100$

= $\frac{553}{7}$

= 79%Gita obtained 486 out of 600

ita percentage = $\frac{486}{600} \times 100$

= $\frac{486}{6}$

= 81%

Therefore Gita performance is better

Q11. Out of an income of Rs 15000, Nazima spends Rs 10200. What per cent of her income does she save?

Total income = Rs.15000

Savings = Income − Expenditure

= Rs.15000 − Rs.10200

= Rs.4800

Percentage of income = $\frac{4800}{15000} \times 100$

= 32%

Q12. 45% of the students in a school are boys. If the total number of students in the school is 880, find the number of girls in the school.

Total number of students = 880

number of boys = 45% of 880

$= \frac{45}{100} \times 880$

$= 45 \times 8.8$

= 396boys

No of girls = Total students − no of boys

= 880 − 396

= 484 girls

Therefore no of girls = 484 girls

Q13. Mr. Sidhana saves 28% of his income. If he saves As 840 per month, find his monthly income.

28%of salary = Rs.840

Let the salary of Mr. Sidhana be x28% of x = 840

$x = \frac{840 \times 100}{28}$

= Rs.3000

Therefore Mr. Sidhana salary is Rs.3000

Q14. In an examination, 8% of the students fail. What percentage of the students pass? If 1650 students appeared in the examination, how many passed?

Total no of students = 1650

8% of students failed

Passed students% = 100% − 8%

= 92%

Therefore number of students passed = 92% of 1650

$= \frac{92}{100} \times 1650$

$= 92 \times 16.5$

= 1518

Therefore 1518 students passed

Q15. In an examination, 92% of the candidates passed and 46 failed. How many candidates appeared?

92% of students passed means 8% students failed

Let the number of students be x then,

8% of x = 46

$x = \frac{46 \times 100}{8}$

= 575

Therefore total number of students = 575