

Grade VII Mathematics
Exercise 7.2 — Solutions (Questions 14–23)

Q14. Find the whole quantity

(i) 25% of it is 9: $x = (9 \times 100) / 25 = 36$. **Answer: 36**

(ii) 75% of it is 15: $x = (15 \times 100) / 75 = 20$. **Answer: 20**

(iii) 12% of it is ■1080: $x = (1080 \times 100) / 12 = \blacksquare 9000$. **Answer: ■9000**

(iv) 8% of it is 40 litres: $x = (40 \times 100) / 8 = 500$ litres. **Answer: 500 litres**

Q15. Mohini's salary

■3960 is 10% of her salary.

Salary = $(3960 \times 100) / 10 = \blacksquare 39,600$.

Answer: Mohini's salary = ■39,600

Q16. Apples in the basket

16% apples go bad, so good apples = $100\% - 16\% = 84\%$.

84% of total apples = 42.

Total apples = $(42 \times 100) / 84 = 50$.

Answer: 50 apples

Q17. Maximum marks

Passing marks = $251 + 19 = 270$.

45% of maximum marks = 270.

Maximum marks = $(270 \times 100) / 45 = 600$.

Answer: 600 marks

Q18. Total strength of the school

Absent students = $100\% - 94\% = 6\%$.

6% of total students = 174.

Total students = $(174 \times 100) / 6 = 290$.

Answer: 290 students

Q19. Number of men

Children = $100\% - 40\% - 39\% = 21\%$.

21% of population = 12600.

Total population = $(12600 \times 100) / 21 = 60000$.

Men = 40% of 60000 = 24000.

Answer: 24,000 men

Q20. Original price of the watch

15% increase = ■240.

15% of original price = 240.

Original price = $(240 \times 100) / 15 = \blacksquare 1600$.

Answer: $\blacksquare 1,600$

Q21. Find the number

(i) 130% of $x = 39$. $x = (39 \times 100) / 130 = 30$. **Answer: 30**

(ii) After an 8% decrease, 92% remains. 92% of $x = 506$. $x = (506 \times 100) / 92 = 550$. **Answer: 550**

Q22. Original price of the shirt

After a 7% reduction, 93% of the original price is $\blacksquare 837$.

93% of $x = 837$.

$x = (837 \times 100) / 93 = \blacksquare 900$.

Answer: $\blacksquare 900$

Q23. Find the number

15% of 60 = 9.

9 is greater than 25% of the number by 3.

25% of the number = $9 - 3 = 6$.

25% of $x = 6$.

$x = (6 \times 100) / 25 = 24$.

Answer: 24