Percentage

Exercise-64

Solution 1:

1. 25 percent or 25%
2. 79 percent or 79%
3. 1 percent or 1%
4. 12 percent or 12%
5. 50 percent or 50%

Solution 2:

1. $\frac{17}{100}$
2. $\frac{55}{100}$
3. $\frac{10}{100}$
4. $\frac{98}{100}$

Exercise-65

Solution 1:

1. $\frac{7}{20} = \frac{7 \times 5}{20 \times 5} = \frac{35}{100}$ (35 percent = 35%)

2. $\frac{43}{50} = \frac{43 \times 2}{50 \times 2} = \frac{86}{100}$ (86 percent = 86%)

3. $\frac{21}{300} = \frac{21 \div 3}{300 \div 3} = \frac{7}{100}$ (7 percent = 7%)

4. $\frac{120}{500} = \frac{120 \div 5}{500 \div 5} = \frac{24}{100}$ (24 per cent = 24%)

5. $\frac{29}{25} = \frac{29 \times 4}{25 \times 4} = \frac{116}{100}$ (116 percent = 116%)

Exercise-66

Solution 1:

1. $0.76 = \frac{76}{100}$ (76 percent = 76%)
2. $0.65 = \frac{65}{100}$ (65 percent = 65%)
3. $0.18 = \frac{18}{100}$ (18 percent = 18%)
4. $0.08 = \frac{8}{100}$ (8 percent = 8%)
5. $0.01 = \frac{1}{100}$ (1 percent = 1%)
6. $0.5 = 0.50 = \frac{50}{100}$ (50 percent = 50%)
7. $0.9 = 0.90 = \frac{90}{100}$ (90 percent = 90%)
8. $0.75 = \frac{75}{100}$ (75 percent = 75%)
9. $0.50 = \frac{50}{100}$ (50 percent = 50%)
10. $0.060 = 0.06 = \frac{6}{100}$ (6 percent = 6%)
11. $0.600 = 0.60 = \frac{60}{100}$ (60 percent = 60%)
12. $0.400 = 0.40 = \frac{40}{100}$ (40 percent = 40%)
13. $0.83 = \frac{83}{100}$ (83 percent = 83%)
14. $0.10 = \frac{10}{100}$ (10 percent = 10%)
15. $1.0 = 1.00 = \frac{100}{100}$ (100 percent = 100%)

Exercise-67

Solution 1:

1. $84 \times \frac{50}{100} = \frac{84 \times 50}{100} = 42$

2. $132 \times \frac{75}{100} = \frac{132 \times 75}{100} = 99$

3. $540 \times \frac{15}{100} = \frac{540 \times 15}{100} = 81$

4. $540 \times \frac{90}{100} = \frac{540 \times 90}{100} = 486$

5. $55 \times \frac{20}{100} = \frac{55 \times 20}{100} = 11$

6. $60 \times \frac{5}{100} = \frac{60 \times 5}{100} = 3$

7. $60 \times \frac{25}{100} = \frac{60 \times 25}{100} = 15$

8. $175 \times \frac{60}{100} = \frac{175 \times 60}{100} = 105$

9. $4800 \times \frac{7}{100} = \frac{4800 \times 7}{100} = 336$

10. $25000 \times \frac{3}{100} = \frac{25000 \times 3}{100} = 750$

Solution 2:

Maximum marks = 800

35% of 800 marks are required for passing.

$$35\% \text{ of } 800 = 800 \times \frac{35}{100}$$

$$= 280$$

$\therefore$ 280 marks are required for passing.

Exercise-68

Solution 1:

1. $\frac{24}{50} = \frac{24 \times 2}{50 \times 2} = \frac{48}{100}$ = 48 percent
2. $\frac{16}{25} = \frac{16 \times 4}{25 \times 4} = \frac{64}{100}$ = 64 percent
3. $\frac{36}{25} = \frac{36 \times 4}{25 \times 4} = \frac{144}{100}$ = 144 percent
4. $\frac{13}{20} = \frac{13 \times 5}{20 \times 5} = \frac{65}{100}$ = 65 percent
5. $\frac{16}{200} = \frac{16 \div 2}{200 \div 2} = \frac{8}{100}$ = 8 percent
6. $\frac{160}{200} = \frac{160 \div 2}{200 \div 2} = \frac{80}{100}$ = 80 percent
7. $\frac{60}{200} = \frac{60 \div 2}{200 \div 2} = \frac{30}{100}$ = 30 percent
8. $\frac{7}{10} = \frac{7 \times 10}{10 \times 10} = \frac{70}{100}$ = 70 percent
9. $\frac{8}{5} = \frac{8 \times 20}{5 \times 20} = \frac{160}{100}$ = 160 percent
10. $\frac{222}{300} = \frac{222 \div 3}{300 \div 3} = \frac{74}{100}$ = 74 percent
11. $\frac{18}{60} = \frac{3}{10} = \frac{3 \times 10}{10 \times 10} = \frac{30}{100}$ = 30 percent
12. $\frac{280}{400} = \frac{280 \div 4}{400 \div 4} = \frac{70}{100}$ = 70 percent

Solution 2(1):

760 out of 1000 is expressed as $\frac{760}{1000}$

Finding out the percentage marks means making the denominator 100.

We divide the numerator and denominator by 10.

Thus, $\frac{760}{1000} = \frac{760 \div 10}{1000 \div 10} = \frac{76}{100}$ = 76 percent

∴ Shakila scored 76 % marks.

Solution 2(2):

75 out of 625 is expressed as $\frac{75}{625}$

$\frac{75}{625} = \frac{75 \div 25}{625 \div 25} = \frac{3}{25}$

$\frac{75}{625}$ and $\frac{3}{25}$ are equivalent fractions.

We have to convert $\frac{3}{25}$ into a percentage.

To get the denominator 100,

we multiply the numerator and denominator by 4.

$\frac{3}{25} = \frac{3 \times 4}{25 \times 4} = \frac{12}{100}$ = 12 percent

12% of the total number of letters were greeting cards.

Solution 2(3):

1 hectare = 10,000 sq. m

∴ 3 hectares = 30,000 sq. m

19500 out of 30,000 is expressed as $\frac{19500}{30000}$

We have to convert it into an equivalent fraction with denominator 100.

So, we divide the numerator and the denominator by 300

∴ $\frac{19500}{30000} = \frac{19500 \div 300}{3000 \div 300} = \frac{65}{100}$ = 65 percent

Namdev sowed jowar in 65% of his total land.