DAY 1

Q1 A batsman scored 110 runs, out of which 3 boundaries & 8 sixes. What % of his total score did he make by running?

Ans total runs = 110

boundary = $3 \times 4 = 12$ run

six = $8 \times 6 = 48$

$48 + 12 = 60$ runs

Runs by running = $110 - 60 = 50$

% = $\frac{50}{110} \times 100 = \frac{500}{11} = 45\frac{5}{11}\%$

$$\begin{array}{r} 45 \\ 11 \overline{)500} \\ -44 \\ \hline 60 \\ -55 \\ \hline 5 \end{array}$$

Q2 Two students appeared at exam. One of them got 9 more than other & his marks was 56% of sum of their marks. Find his marks are?

(33, 42)

Sol let marks = x, $x+9$

Sum = $x + x + 9 = 2x + 9$

56% of sum = $(x+9)$

$$56 \times \frac{2x+9}{100} = x + 9$$

$$56(2x+9) = (x+9)100$$

$$112x + 504 = 100x + 900$$

$$12x = 396$$

$$x = \frac{396}{12} \quad \begin{matrix} 66 \\ x \end{matrix} \quad 33$$

$x + 9 = 42$

(03) A fruit seller had some apples. He sells 40% of them & still has 420. Earlier he had?

Ans Let total = x

after selling 40% $\rightarrow \left(x - \frac{40 \times x}{100}\right) = 420$

$$\frac{100x - 40x}{100} = 420$$

$$\frac{60x}{100} = 420 \rightarrow x = \frac{420 \times 10}{6}$$

$$x = 700$$

(04) What percentage of nos from 1 to 70 have 1 or 9 in units digit

Ans 9, 19, 29, 39, 49, 59, 69 = 7

1 - - - +7

14

$$\% \rightarrow \frac{14}{70} \times 100 = 20\%$$

(5) If A = x% of y & B = y% of x, which is true

(a) A < B

(b) A > B

(c) if x < y then A > B

(d) None

Ans None ∵ A = x% of y = $\frac{xy}{100}$ = y% of x = B