# Aptitude Assignment 6

Que 1

Soln:

A does $4/5^{th}$ of work in 315 times compared to B

work completed by A & B

$A + B = 12$

1 day work $= \frac{1}{(A+B)} = \frac{1}{12}$

hence

$(A \times \frac{3}{5}) // (\frac{4}{5}) = \frac{B \times 1}{1}$

$A \times \frac{3}{5} \times \frac{5}{4} = B$

$3A = 4B$

$A : B = 4 : 3$

They complete work in 12 days

Total work $= (4+3)x \times 12$

$= 84x$

Time taken by A $= \frac{84x}{4x} = 21$ days

Que 2

soln.

1M, 3W, 4C - 96 hr

$1M + 4C + 3W = 96\ hr$ .. (1)

$2M + 8C = 80\ hr$ .. (2)

$2M + 3W = 120\ hr$ .. (3)

Then

$10M + 5W = ?$

$\text{Efficiency} = \frac{W}{T}$

96 hr  80 hr  120 hrs

5 | 6 | 4

480  LCM

$2M + 8C = 6 \longrightarrow 1M + 4C = 3$ .. (4)

$1M + 4C + 3W = 5$

$\Rightarrow (3) + 3W = 5$

$W = \frac{2}{3}$ .. (5)

$2M + 3W = 4$

$2M + 2 = 4$

$2M = 2$

$M = 1$ .. (6)

From (5) & (6)

$10M + 5W = (10 \times 1) + (5 \times \frac{2}{3})$

$10M + 5W = \frac{40}{3}$

Work completed $= \frac{480}{4013} = 36hrs$

Que 3
Soln.
Let No. of seats $x$ & price of each ticket Rs $y$
Total Revenue $= xy$
No. of seats increased by 25% $= 1.25x$
price of each ticket increased by 10% $= 0.90y$

Total Revenue $= 1.25x \times 0.90y$
$= 1.125xy$

increased Revenue $= 1.125xy - xy$
$= 0.125xy$

% increase $= (0.125xy)/xy \times 100$
$= 12.5\%$

Que 4

Soln.

1600 soldiers – 60 days

Each soldier consume – 900 grms/day

After 40 days – 400 soldiers left

Total amount of food consumed by 1600 men in 1 day is

$= 1600 \times 900$

$= 1,440,000$ gm

so total amount consumed in 60 days is

$= 1,440,000 \times 60$

$= 86,400,000$

Now after 40 days 400 soldiers left $= 1600 - 400 = 1200$

Food consumed by 1200 soldiers

$= 1200 \times 1000$

$= 12,00,000$

Required No. of days $= \frac{12,00,000}{1200}$

$= 10$ days

Que 5

Soln.

Let the CP of bicycle $= x$

old SP of bicycle $= x \times 110\%$.

Now new CP $= x \times 90\%$.

& new SP $= x \times 90\% \times 125\%$.

difference betn new SP & old SP $= 60$

$$x \times 90\% \times 125\% - x \times 110\% = 60$$

$$x = \frac{60000}{25}$$

$$x = 2400 \text{ Rs.}$$