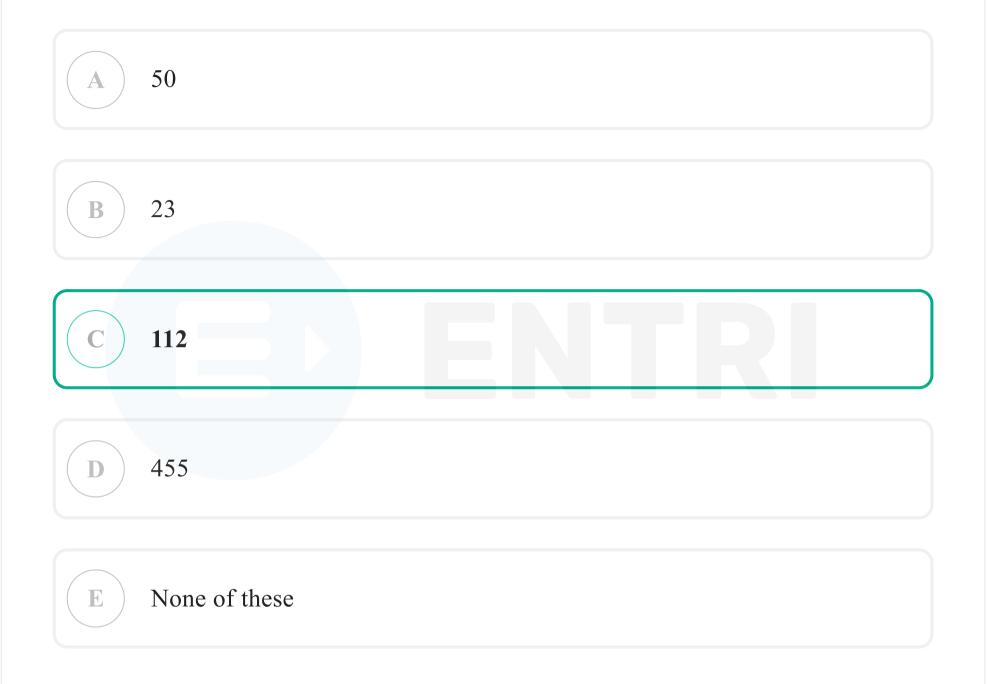
# Banking Daily Quiz Blog - March 23



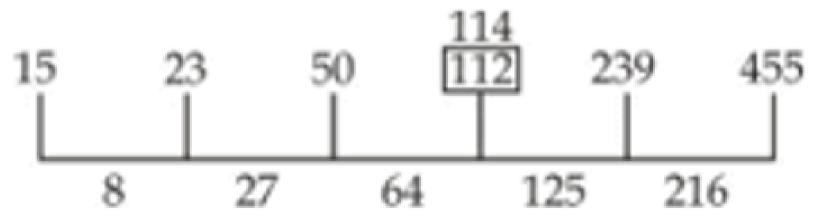


Find the wrong number in the series:

1. 15, 23, 50, 112, 239, 455



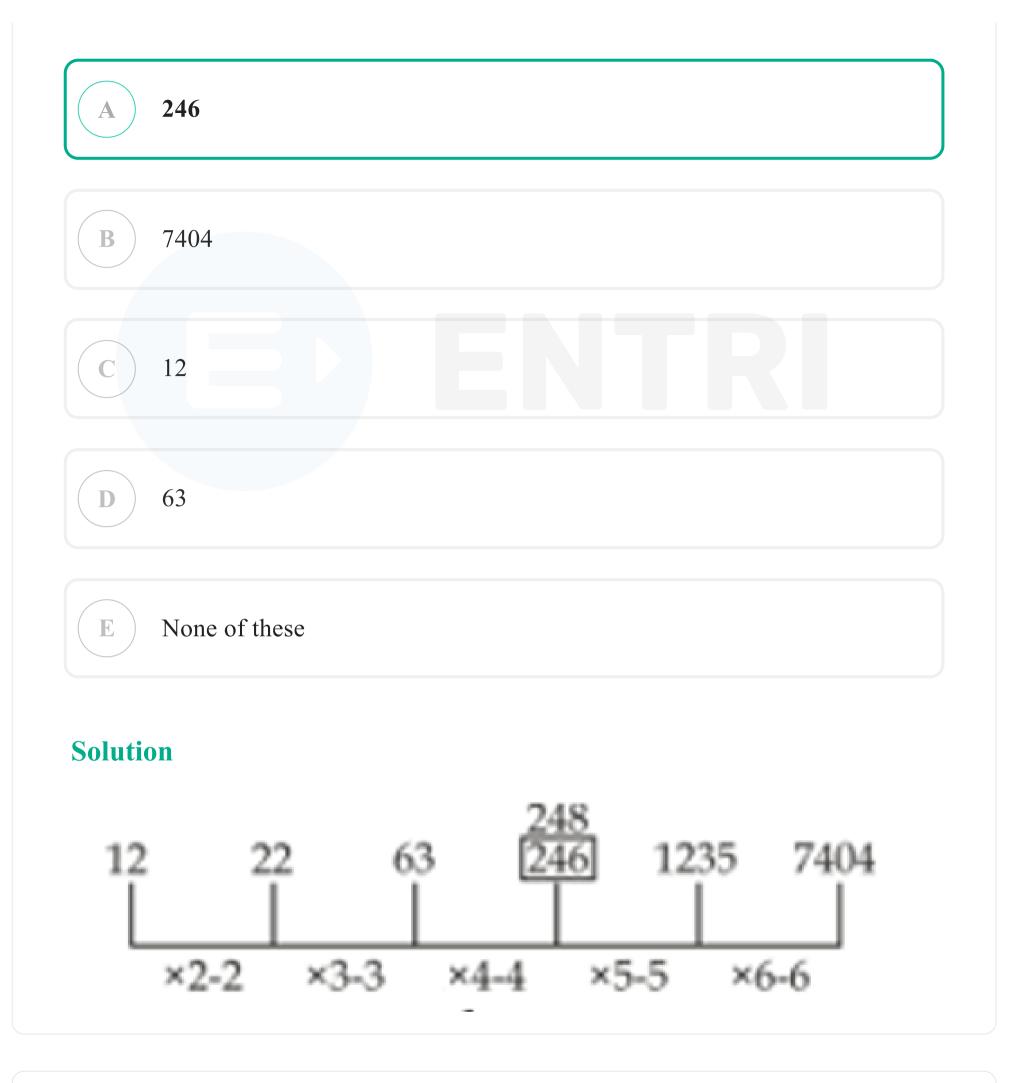
# **Solution**



# Wrong number = 112

# Find the wrong number in the series:

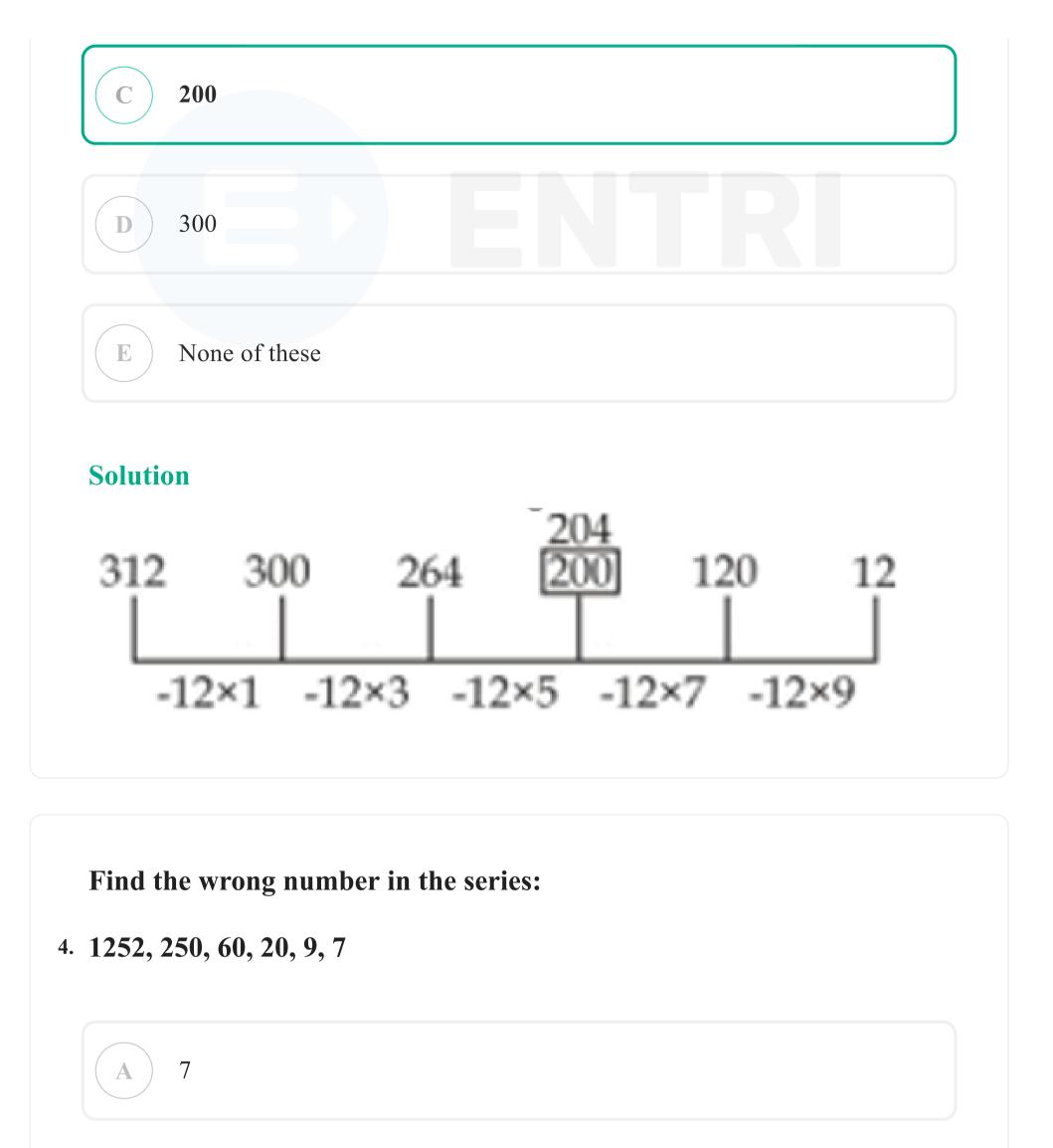
2. 12, 22, 63, 246, 1235, 7404



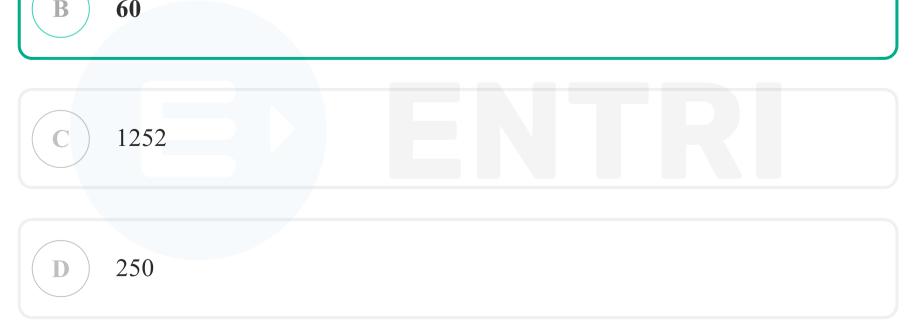
Find the wrong number in the series:

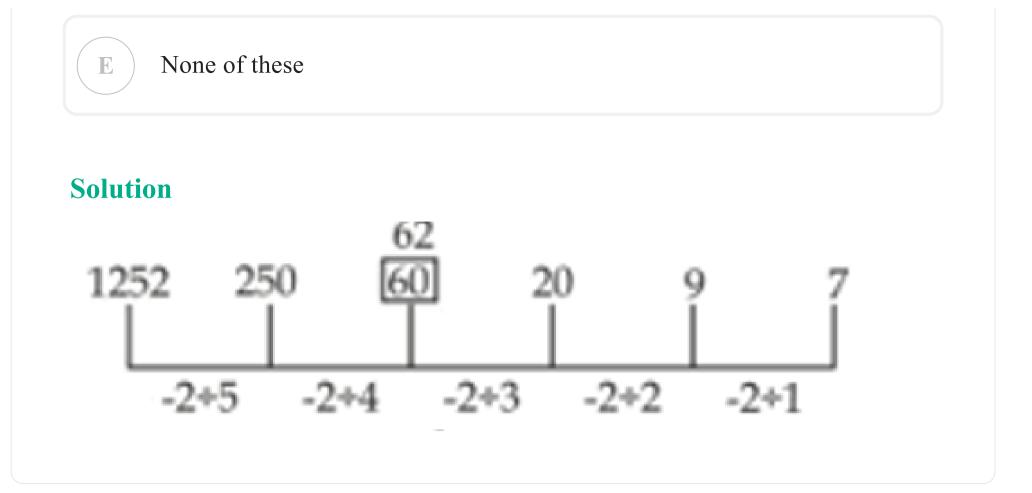
3. 312, 300, 264, 200, 120, 12

| A 312       |  |  |  |
|-------------|--|--|--|
| <b>B</b> 12 |  |  |  |



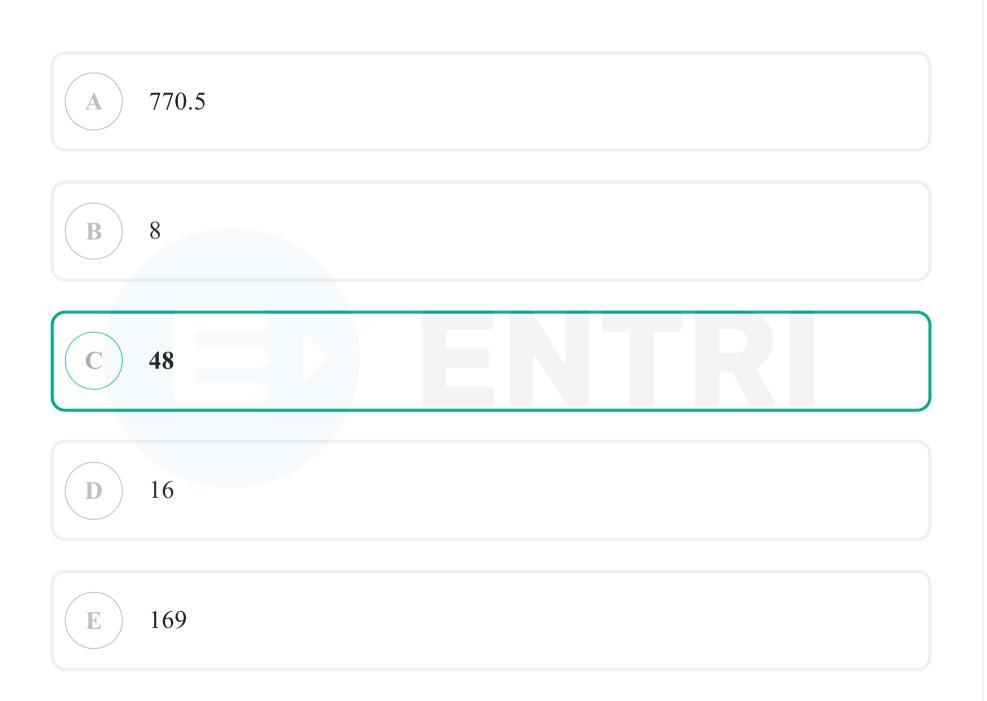
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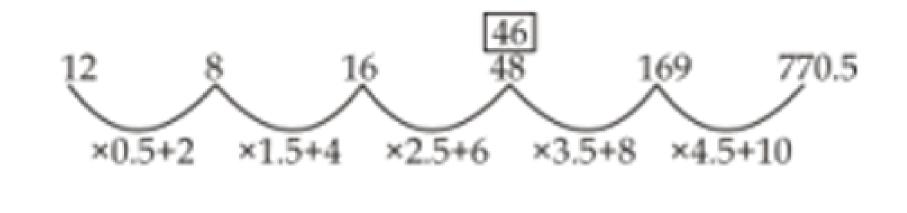


Find the wrong number in the series:

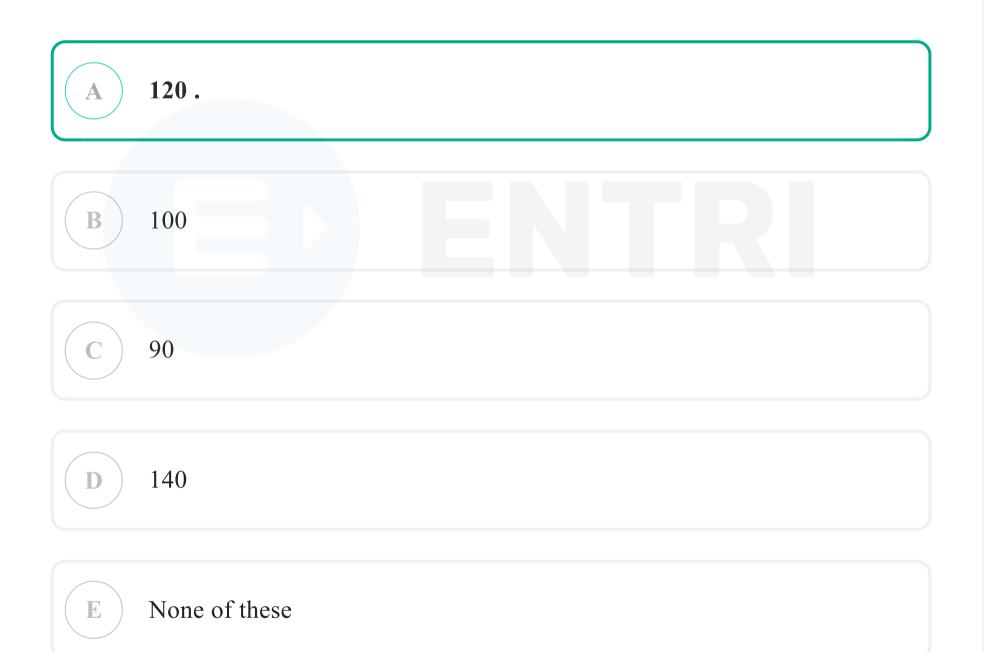




# **Solution**



6. A vessel contains 2.5 liters of water and 10 liters of milk. 20% of the contents of the vessel is removed. To the remaining contents, 'x' liters of water is added to reverse the ratio of water and milk. Then 'y' liters of milk are added again to reverse the ratio of water and milk. What is the value of 'y'?



#### **Solution**

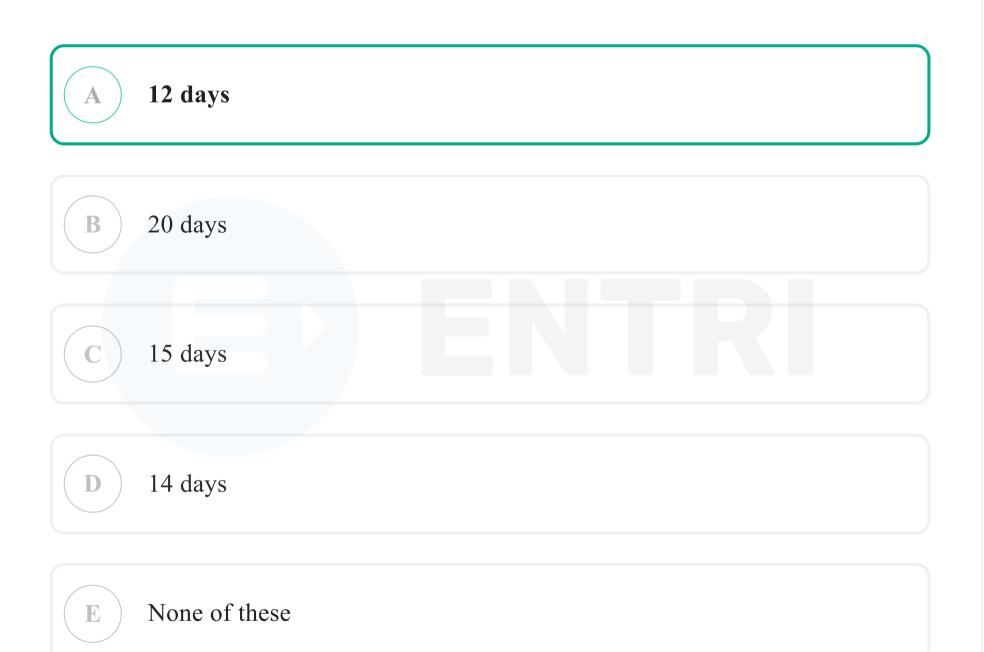
Liters of milk removed 
$$=\frac{1}{5} \times 10 = 2$$
 liter

Liters of water removed 
$$=\frac{1}{5} \times 2.5 = 0.5$$
 liter

 $\frac{2+x}{8} = \frac{4}{1}$ 

$$\Rightarrow x = 30$$
 $rac{32}{8+y} = rac{1}{4} \Rightarrow y = 128 - 8 = 120 ext{ liter}$ 

7. A is thrice as good a workman as B and therefore is able to finish a job in 60 days less than B. If A and B complete  $\frac{2}{3}$  rd of the job and then A is replaced by C, the remaining job is done by B and C in 10 days. If A and B complete  $\frac{3}{4}$  th of the job and then B is replaced by D the remaining job is done by A and D in 5 days. How long will it take for A, B, C and D to complete the job working together?



#### **Solution**

Let B takes 3x days to complete the job

Then A takes x days to complete the job 3x - x = 60

 $\Rightarrow x = 30$ 

B takes 90 days and A takes 30 days to complete the job working alone

let C takes y days to complete the job working alone,

then

$$igg(rac{1}{90}+rac{1}{y}igg)=rac{1}{3}$$
 $\Rightarrow y=45$ 

Let D takes z days to complete the job working alone,

$$5\left(rac{1}{30}+rac{1}{z}
ight)=rac{1}{4}$$
 $\Rightarrow z=60$ 

Required work in one day =  $\frac{1}{30} + \frac{1}{90} + \frac{1}{45} + \frac{1}{60} = \frac{6+2+4+3}{180} = \frac{15}{180} = \frac{1}{12}$ 

Working together A, B, C and D will complete the work in 12 days

8. P, Q and R are 3 small pumps fitted to a tank. S is a large pump fitted to the tank. Q is 50% more efficient than P. R is more efficient than Q. S is 50% more efficient than R. All of the pipes are used to fill the tank. What is the ratio of the time taken by pumps P and R to fill the tank together to the time taken by pumps Q and S to fill the tank together ?

| A 3:2        |  |
|--------------|--|
| <b>B</b> 4:3 |  |



# **Solution**

Let P fills 2x litres a day

then Q fills 3x litres a day

R fills  $\frac{4}{3} \times 3x = 4x$  litres a day

And S fills  $\frac{3}{2} \times 4x = 6x$  litres a day

Let total capacity of tank be 9x litres

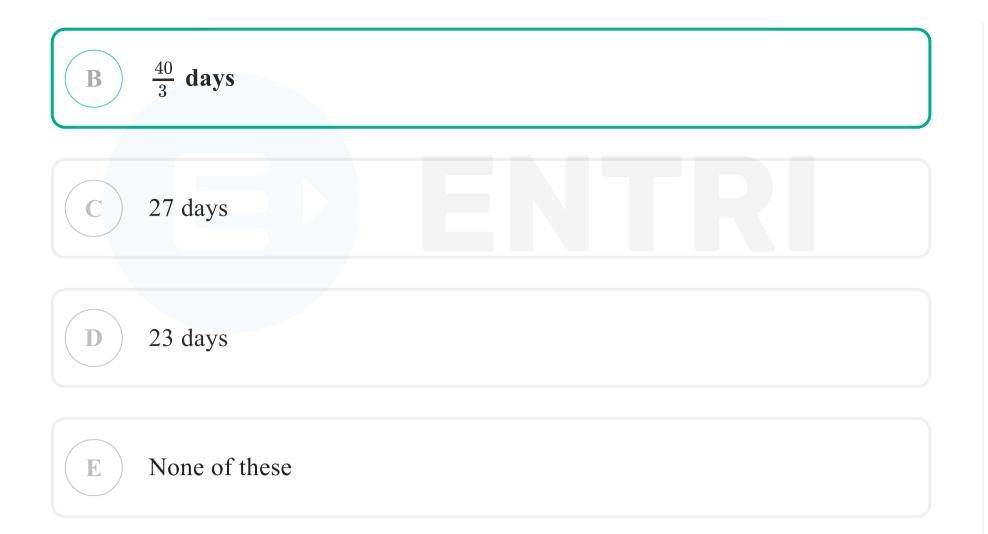
Time taken by P and R to fill the tank together  $=\frac{9x}{2x+4x}=\frac{3}{2}$  days

Time taken by S and Q to fill the tank together  $=\frac{9x}{3x+6x}=1$  days

Required ratio = 3:2

9. If 10 men and 15 women complete a piece of work in 8 days, while 12 men and 8 women can complete the same piece of work in 10 days. If a boy is 50% less efficient than the man then find the time taken by 2 men, 4 women and 18 boys to complete the work.





# **Solution**

Let the efficiency of men be m and efficiency of women be w

ATQ,

(10m + 15w)8 = (12m + 8w)10

80m + 120w = 120m + 80w

40m = 40w

And, m = w = 2b

2m+4w+18b
ightarrow 2m+4m+9m
ightarrow 15m

15m imes x = 25m imes 8

$$x = rac{40}{3}$$
 days

10. 2n years ago, the age of Ramesh was four times that of his son and n years ago, the age of Ramesh was thrice that of his son. If n years later, the sum of the ages of Ramesh and his son will be 80 years, then

# the difference in the ages of Ramesh and his son is?



# **Solution**

Let, the present ages of Ramesh and his son be x and y respectively

2n years ago,

x - 2n = 4(y - 2n)

x = 4y - 6n....(i)

n years ago,

$$x-n=3(y-n)$$
  
 $\Rightarrow x=3y-2n\dots$  (ii)

$$y = 4n$$

And,

$$x=4 imes 4n-6n=10n$$

'n' years later,

x + n + y + n = 80

$$\Rightarrow 4n+n+10n+n=80$$

 $\Rightarrow 16n = 80$ 

 $\Rightarrow n = 5$ 

Difference in their ages = 10n - 4n = 50 - 20 = 30 years



