**1.**A machine X can print one lakh books in 6 hours, machine Y can print the same number of books in 4 hours while machine Z can print them in 24 hours. All the machines are started at 9 A.M. while machine X is closed at 11 A.M. and the remaining two machines complete work. At what will the machines printing one lakh books?

A.11.50 B.12.09

C.12.53 D.11.024

Answer: Option D

Explanation:

(X + Y + Z)'s 1 hour's work =( 1 + 1 + 1 )= 11 .

06 04 24 24

Work done by X, Y and Z in 2 hours = ( 11 x 2 ) = 11

24 12

Remaining work = ( 1 - 11 ) = 1 .

12 12

(Q + R)'s 1 hour's work = ( 1 + 1 ) = 7 .

04 24 24

Now, 7 work is done by Q and R in 1 hour.

24

So, 1 work will be done by Q and R in ( 1 x 7 )=07hours =0.024 hours.

12 12 24 288

So, the work will be finished approximately 0.024 hours after 11 A.M., i.e., around 11.024 P.M.

**2.**A can finish a work in 20 days and B can do the same work in 25 days. B worked for 10 days and left the job. In how many days, A alone can finish the remaining work?

work=1/25days

B's 10 day's work = ( 1 x 10 ) = 2 .

25

A.13 B.14

C.24 D.28

Answer: Option C

Explanation:

B’s 1 day

5

Remaining work = ( 1 - 2 ) = 3 .

5 5

Now, 1 work is done by A in 1 day.

20

Therefore 3 work is done by A in ( 20 x 3 ) = 12 days.

5 5

**3.**Two number are in the ratio 6: 7. If 8 is subtracted from each, the new numbers are in the ratio 04 : 05. The smaller number is:

A. 27 B. 36

C. 42 D. 55

Answer: Option B

Explanation:

Let the numbers be 6x and 7x.

Then, 6x - 12 = 4

7x - 12 5

5(6x - 12) = 4(7x - 12)

x = 06.

The smaller number = (6 x 6) = 36.

**4.**In a bowl, there are coins of 50p, 10p and 5p in the ratio of 1: 2 : 3. If there is Rs. 30 in all, how many 5 p coins are there(approximately)?

A. 50 B. 105

C. 150 D. 200

Answer: Option B

Explanation:

Let the number of 50p, 10p and 5p coins be m, 2m, 3m respectively.

Then, sum of their values = Rs.50m +10 x 2m+ 5 x 3m = Rs. 85m

100 100 100 100

85m = 30 m = 30 x 100 = 35.

100 85

Hence, the number of 5 p coins = (3 x 35) = 105.

**5.** What is the largest 5 digit number exactly divisible by 88?

A. 99944 B. 99998

C. 99988 D. 99968

Answer: Option D

Explantion:

The largest 5 digit number is 99999.

When this number is divided by 88,the remainder is 31

I,e 99999%88=31

Subtracting 31 from 99999 we get 99968

**6.**X can do a certain work in the same time in which Y and Z together can do it. If X and Y together could do it in 25 days and Z alone in 50 days, then Y alone could do it in:

A. 150 days B. 200 days

C. 250 days D. 100 days

Answer: Option D

Explanation:

(X + Y)'s 1 day's work = 1

25

Z's 1 day's work = 1

50

(X + Y + Z)'s 1 day's work = 1 + 1 = 3 . .... (i)

25 50 50

A's 1 day's work = (X + Y)'s 1 day's work .... (ii)

From (i) and (ii), we get: 2 x (X's 1 day's work) = 3

50

X's 1 day's work = 3 .

100

Y's 1 day's work 1 - 3 = 1 .

25 100 100

So, Y alone could do the work in 100 days.

**7.**A is thrice as good as workman as B and therefore is able to finish a job in 90 days less than B. Working together, they can do it in:

A. 200 days B. 22.1days

C. 25.9 days D. 33.75 days

Answer: Option B

Explanation:

Ratio of times taken by A and B = 1 : 3.

The time difference is (3 - 1) 2 days while B take 3 days and A takes 1 day.

If difference of time is 2 days, B takes 3 days.

If difference of time is 90 days, B takes 3 x 90=135 days.

2

So, A takes 45 days to do the work.

A's 1 day's work = 1

45

B's 1 day's work = 1

135

(A + B)'s 1 day's work =1 + 1 = 4

45 135 135

A and B together can do the work in 135 = 33.75 days.

4

**8.**An electric motor can fill the tank in 3hrs.Because of the leak int the tank it took 4hr to fill the tank. If the tank is full how much time will it take to empty it?

A.10 B.12

C.15 D.21

Answer: Option B

Explanation:

Time taken by the motor to fill the tank (without leak) 1/3 hr

Time taken by the motor to fill the tank (with leak) 4 hr

Therefore, work done by rhe leak 1 - 1 =1

3 4 12

So leak will empty the tank in 12hr

**9.** If the number 58\*673 is completely divisible by 9, what is the the smallest whole number in place of \*?

A. 3 B. 7

C. 5 D. 9

Answer: Option B

Explanation:5+8+x+6+7+3 is divisible by 9

29+x is divisible by 9

X is 7

**10.** What is the smallest 5 digit number exactly divisible by 111?

A. 10010 B. 10011

C. 10012 D. 10013

Answer: A

Explanation: smallest 5 digit number is 10000

When 10000 is divided by 111 remainder is 10

Therefore smallest 5 digit number divisible by 111 is 10010