

Book For
Bank of Baroda



Bank of Baroda Sub Staff Aptitude Sample Paper



Visit our websites:

www.Couponlal.com

www.Myexamportal.com

www.Examlal.com

| www.Joblal.com

| www.joinexam.in

| www.examy.com

(1) A, B and C can do a piece of work in 20, 30 and 60 days respectively. In how many days can A do the work if he is assisted by B and C on every third day?

[A] 12 days

[B] 15 days

[C] 16 days

[D] 18 days

Answer : [B]

Explanation:

$$\text{A's 2 day's work} = \left(\frac{1}{20} \times 2\right) = \frac{1}{10}.$$

$$\text{(A + B + C)'s 1 day's work} = \left(\frac{1}{20} + \frac{1}{30} + \frac{1}{60}\right) = \frac{6}{60} = \frac{1}{10}.$$

$$\text{Work done in 3 days} = \left(\frac{1}{10} + \frac{1}{10}\right) = \frac{1}{5}.$$

Now, $\frac{1}{5}$ work is done in 3 days.

∴ Whole work will be done in $(3 \times 5) = 15$ days.

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(2) A is thrice as good as workman as B and therefore is able to finish a job in 60 days less than B. Working together, they can do it in:

[A] 20 days

[B]

$22\frac{1}{2}$ days

[C] 25 days

[D] 30 days

Answer : [B]

Explanation:

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

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

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

If difference of time is 60 days, B takes $\left(\frac{3}{2} \times 60\right) = 90$ days.

So, A takes 30 days to do the work.

$$\text{A's 1 day's work} = \frac{1}{30}$$

$$\text{B's 1 day's work} = \frac{1}{90}$$

$$\text{(A + B)'s 1 day's work} = \left(\frac{1}{30} + \frac{1}{90}\right) = \frac{4}{90} = \frac{2}{45}$$

∴ A and B together can do the work in $\frac{45}{2} = 22\frac{1}{2}$ days.

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(3) A can do a piece of work in 4 hours; B and C together can do it in 3 hours, while A and C together can do it in 2 hours. How long will B alone take to do it?

[A] 8 hours

[B] 10 hours

[C] 12 hours

[D] 24 hours

Answer : [C]

Explanation:

$$A's\ 1\ hour's\ work = \frac{1}{4};$$

$$(B + C)'s\ 1\ hour's\ work = \frac{1}{3};$$

$$(A + C)'s\ 1\ hour's\ work = \frac{1}{2}.$$

$$(A + B + C)'s\ 1\ hour's\ work = \left(\frac{1}{4} + \frac{1}{3}\right) = \frac{7}{12}.$$

$$B's\ 1\ hour's\ work = \left(\frac{7}{12} - \frac{1}{2}\right) = \frac{1}{12}.$$

∴ B alone will take 12 hours to do the work.

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(4) A and B can together finish a work 30 days. They worked together for 20 days and then B left. After another 20 days, A finished the remaining work. In how many days A alone can finish the work?

[A] 40

[B] 50

[C] 54

[D] 60

Answer : [D]

Explanation:

$$(A + B)'s\ 20\ day's\ work = \left(\frac{1}{30} \times 20\right) = \frac{2}{3}.$$

$$\text{Remaining work} = \left(1 - \frac{2}{3}\right) = \frac{1}{3}.$$

Now, $\frac{1}{3}$ work is done by A in 20 days.

Therefore, the whole work will be done by A in $(20 \times 3) = 60$ days.

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(5) X and Y can do a piece of work in 20 days and 12 days respectively. X started the work alone and then after 4 days Y joined him till the completion of the work. How long did the work last?

[A] 6 days

[B] 10 days

[C] 15 days

[D] 20 days

Answer : [B]

Explanation:

$$\text{Work done by X in 4 days} = \left(\frac{1}{20} \times 4\right) = \frac{1}{5}.$$

$$\text{Remaining work} = \left(1 - \frac{1}{5}\right) = \frac{4}{5}.$$

$$(X + Y)'s\ 1\ day's\ work = \left(\frac{1}{20} + \frac{1}{12}\right) = \frac{8}{60} = \frac{2}{15}.$$

Now, $\frac{2}{15}$ work is done by X and Y in 1 day.

So, $\frac{4}{5}$ work will be done by X and Y in $\left(\frac{15}{2} \times \frac{4}{5}\right) = 6$ days.

Hence, total time taken = $(6 + 4)$ days = 10 days.

(6) Ravi and Kumar are working on an assignment. Ravi takes 6 hours to type 32 pages on a computer, while Kumar takes 5 hours to type 40 pages. How much time will they take, working together on two different computers to type an assignment of 110 pages?

[A] 7 hours 30 minutes

[B] 8 hours

[C] 8 hours 15 minutes

[D] 8 hours 25 minutes

Answer : [C]

Explanation:

$$\text{Number of pages typed by Ravi in 1 hour} = \frac{32}{6} = \frac{16}{3}.$$

$$\text{Number of pages typed by Kumar in 1 hour} = \frac{40}{5} = 8.$$

$$\text{Number of pages typed by both in 1 hour} = \left(\frac{16}{3} + 8 \right) = \frac{40}{3}.$$

$$\therefore \text{Time taken by both to type 110 pages} = \left(110 \times \frac{3}{40} \right) \text{ hours}$$

$$= 8\frac{1}{4} \text{ hours (or) 8 hours 15 minutes.}$$

(7) A hall is 15 m long and 12 m broad. If the sum of the areas of the floor and the ceiling is equal to the sum of the areas of four walls, the volume of the hall is:

[A] 720

[B] 900

[C] 1200

[D] 1800

Answer : [C]

Explanation:

$$2(15 + 12) \times h = 2(15 \times 12)$$

$$\Rightarrow h = \frac{180}{27} \text{m} = \frac{20}{3} \text{m}.$$

$$\therefore \text{Volume} = \left(15 \times 12 \times \frac{20}{3} \right) \text{m}^3 = 1200 \text{ m}^3.$$

(8) 66 cubic centimetres of silver is drawn into a wire 1 mm in diameter. The length of the wire in metres will be:

[A] 84

[B] 90

[C] 168

[D] 336

Answer : [A]

Explanation:

Let the length of the wire be h .

$$\text{Radius} = \frac{1}{2} \text{mm} = \frac{1}{20} \text{cm. Then,}$$

$$\Rightarrow \frac{22}{7} \times \frac{1}{20} \times \frac{1}{20} \times h = 66.$$

$$66 \times 20 \times 20 \times 7$$

$$\Rightarrow h = \left(\frac{\quad}{22} \right) = 8400 \text{ cm} = 84 \text{ m.}$$

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(9) A right triangle with sides 3 cm, 4 cm and 5 cm is rotated the side of 3 cm to form a cone. The volume of the cone so formed is:

[A] $12\pi \text{ cm}^3$

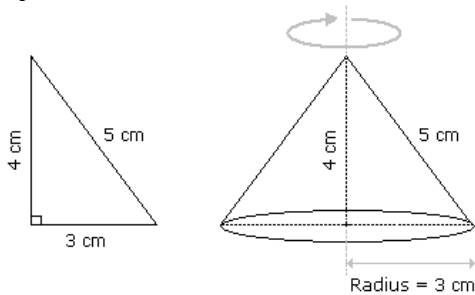
[B] $15\pi \text{ cm}^3$

[C] $16\pi \text{ cm}^3$

[D] $20\pi \text{ cm}^3$

Answer : [A]

Explanation:



Clearly, we have $r = 3 \text{ cm}$ and $h = 4 \text{ cm}$.

$$\therefore \text{Volume} = \frac{1}{3}\pi r^2 h = \left(\frac{1}{3} \times \pi \times 3^2 \times 4 \right)_{\text{cm}^3} = 12\pi \text{ cm}^3.$$

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(10) A metallic sheet is of rectangular shape with dimensions 48 m x 36 m. From each of its corners, a square is cut off so as to make an open box. If the length of the square is 8 m, the volume of the box (in m^3) is:

[A] 4830

[B] 5120

[C] 6420

[D] 8960

Answer : [B]

Explanation:

Clearly, $l = (48 - 16)\text{m} = 32 \text{ m}$,

$b = (36 - 16)\text{m} = 20 \text{ m}$,

$h = 8 \text{ m}$.

$$\therefore \text{Volume of the box} = (32 \times 20 \times 8) \text{ m}^3 = 5120 \text{ m}^3.$$

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(11) The curved surface area of a cylindrical pillar is 264 m^2 and its volume is 924 m^3 . Find the ratio of its diameter to its height.

[A] 3 : 7

[B] 7 : 3

[C] 6 : 7

[D] 7 : 6

Answer : [B]

Explanation:

$$\frac{\pi r^2 h}{2\pi rh} = \frac{924}{264} \Rightarrow r = \left(\frac{924}{264} \times 2 \right) = 7 \text{ m.}$$

And, $2\pi rh = 264 \Rightarrow h = 264 \times \frac{7}{2} \times \frac{1}{\pi} \times \frac{1}{\pi} = 6 \text{ m.}$

$$\therefore \text{Required ratio} = \frac{2r}{h} = \frac{14}{6} = \left(\frac{7}{3}, \frac{22}{2}, \frac{7}{7} \right)$$

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(12) 9548 + 7314 = 8362 + (?)

- [A] 8230
- [B] 8410
- [C] 8500
- [D] 8600
- [E] None of these

Answer : [C]

Explanation:

$$9548 \quad 16862 = 8362 + x \quad + 7314 \quad x = 16862 - 8362 \quad \text{-----} \quad = 8500 \quad 16862 \quad \text{-----}$$

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(13) The smallest 6 digit number exactly divisible by 111 is:

- [A] 111111
- [B] 110011
- [C] 100011
- [D] 110101
- [E] None of these

Answer : [C]

Explanation:

The smallest 6-digit number 100000. 111) 100000 (900 999 ----- 100 --- Required number = 100000 + (111 - 10

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(14) 106 x 106 - 94 x 94 = ?

- [A] 2400
- [B] 2000
- [C] 1904
- [D] 1906
- [E] None of these

Answer : [A]

Explanation:

$$\begin{aligned} 106 \times 106 - 94 \times 94 &= (106)^2 - (94)^2 \\ &= (106 + 94)(106 - 94) \quad [\text{Ref: } (a^2 - b^2) = (a + b)(a - b)] \\ &= (200 \times 12) \\ &= 2400. \end{aligned}$$

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(15) $8796 \times 223 + 8796 \times 77 = ?$

[A] 2736900

[B] 2638800

[C] 2658560

[D] 2716740

[E] None of these

Answer : [B]

Explanation:

$$\begin{aligned}8796 \times 223 + 8796 \times 77 &= 8796 \times (223 + 77) \quad [\text{Ref: By Distributive Law}] \\ &= (8796 \times 300) \\ &= 2638800\end{aligned}$$

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(16) The average of 20 numbers is zero. Of them, at the most, how many may be greater than zero?

[A] 0

[B] 1

[C] 10

[D] 19

Answer : [D]

Explanation:

Average of 20 numbers = 0.

\therefore Sum of 20 numbers $(0 \times 20) = 0$.

It is quite possible that 19 of these numbers may be positive and if their sum is a then 20th number is $(-a)$.

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(17) A family consists of two grandparents, two parents and three grandchildren. The average age of the grandparents is 67 years, that of the parents is 35 years and that of the grandchildren is 6 years. What is the average age of the family?

[A] $28\frac{4}{7}$ years

[B] $31\frac{5}{7}$ years

[C] $32\frac{1}{7}$ years

[D] None of these

Answer : [B]

Explanation:

$$\begin{aligned}\text{Required average} &= \left(\frac{67 \times 2 + 35 \times 2 + 6 \times 3}{2 + 2 + 3} \right) \\ &= \left(\frac{134 + 70 + 18}{7} \right) \\ &= \frac{222}{7} \\ &= 31\frac{5}{7} \text{ years.}\end{aligned}$$

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(18) The captain of a cricket team of 11 members is 26 years old and the wicket keeper is 3 years older. If the ages of these two are excluded, the average age of the remaining players is one year less than the average age of the whole team. What is the average age of the team?

- [A] 23 years
- [B] 24 years
- [C] 25 years
- [D] None of these

Answer : [A]

Explanation:

Let the average age of the whole team by x years.
 $\therefore 11x - (26 + 29) = 9(x - 1)$
 $\Rightarrow 11x - 9x = 46$
 $\Rightarrow 2x = 46$
 $\Rightarrow x = 23.$
So, average age of the team is 23 years.

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(19) The average monthly income of P and Q is Rs. 5050. The average monthly income of Q and R is Rs. 6250 and the average monthly income of P and R is Rs. 5200. The monthly income of P is:

- [A] 3500
- [B] 4000
- [C] 4050
- [D] 5000

Answer : [B]

Explanation:

Let P, Q and R represent their respective monthly incomes. Then, we have:
 $P + Q = (5050 \times 2) = 10100 \dots (i)$
 $Q + R = (6250 \times 2) = 12500 \dots (ii)$
 $P + R = (5200 \times 2) = 10400 \dots (iii)$
Adding (i), (ii) and (iii), we get: $2(P + Q + R) = 33000$ or $P + Q + R = 16500 \dots (iv)$
Subtracting (ii) from (iv), we get $P = 4000.$
 \therefore P's monthly income = Rs. 4000.

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com

(20) The average weight of A, B and C is 45 kg. If the average weight of A and B be 40 kg and that of B and C be 43 kg, then the weight of B is:

- [A] 17 kg
- [B] 20 kg
- [C] 26 kg
- [D] 31 kg

Answer : [D]

Explanation:

Let A, B, C represent their respective weights. Then, we have:
 $A + B + C = (45 \times 3) = 135 \dots (i)$
 $A + B = (40 \times 2) = 80 \dots (ii)$
 $B + C = (43 \times 2) = 86 \dots (iii)$
Adding (ii) and (iii), we get: $A + 2B + C = 166 \dots (iv)$
Subtracting (i) from (iv), we get : $B = 31.$
 \therefore B's weight = 31 kg.

www.myexamportal.com | www.couponlal.com | www.examlal.com | www.joblal.com | www.examy.com
