# Date Interpretation Table Chart Questions for IBPS PO Pre, SBI PO Pre, IBPS Clerk Mains, SBI Clerk Mains, IBPS SO Pre and RRB Scale I Pre Exams.

## Word Problems Quiz 2

**Direction: Study the following questions carefully and choose the right answer.**

**1. Sonu and Titu entered into a partnership for a year in which Sonu invested Rs 120000 and Titu invested Rs 70000. After 4 months, Sonu invested Rs 80000 more whereas after 5 months, Titu invested Rs 30000 more. When two months were left Sweety also joined investing Rs 400000 as her contribution. If the profit for the year was 12.5% of 1572000, find the share of Sonu, Titu and Sweety.**

A. Rs 40000, Rs 104000, Rs 52500
B. Rs 104000, Rs 52500, Rs 40000
C. Rs 52500, Rs 40000, Rs 104000
D. Rs 78420, Rs. 48645, Rs. 48770
E. None of these

**2. The simple interest on a certain sum for 2 years at a certain rate of interest is Rs.2000 and compound interest on the same sum, same time and same rate of interest is Rs.2050. Then find the ratio between CI for 2 years and CI for 3 years?**

A. 820 : 1361 B. 820 : 1261 C. 1261 : 820 D. 1361 : 820 E. None of these

**3. 2 employees and 3 trainees together can finish a project in 7 days, 6 employees and 13 trainees together can finish the same project in 2 days. Find the time taken by 4 employees and 4 trainees together to finish the same work.**

A. 4 days B. 5 days C. 6 days D. 8 days E. None of these

**4. Meenu has some money. She can buy 40 books or 90 pens with it. She keeps 20% of the money for food and with the remaining buys 36 pens and some books. Find the number of books she buys.**

A. 15 B. 14 C. 18 D. 16 E. 12

**5. If four coins are tossed together, what is the probability of at least getting 2 heads?**

A. $\frac{13}{16}$ B. $\frac{11}{16}$ C. $\frac{9}{16}$ D. $\frac{15}{16}$ E. None of these

**6. A milkman completely fills his 24 liter cistern with two type of milks A and B in the ratio 7 : 5. The cost price of type A milk is Rs.45 per liter. If he sold this mixture at the rate of Rs.56 per liter at a profit of 12%, then find the per liter cost price of type B milk.**

A. Rs. 54 B. Rs. 47 C. Rs. 62 D. Rs. 57 E. None of these

**7. Arjun is 2 years younger to Bhuvan whose age is 12 years. When 10 years are subtracted from the present age of Shanju and then the result is divided by 6, the present age of his grandson Arjun is obtained. Then what is the ratio of ages of Arjun, Bhuvan and shanju?**

A. 5 : 6 : 35 B. 7 : 2 : 23 C. 7 : 2 : 35 D. 5 : 6 : 23 E. None of these

**8. Aman goes to park daily. His last week average speed with which he completed one round of the park was 47Km/h, for the first four days was 37Km/h, and that for the last four days was 52.5Km/h. Find out the time taken by Aman to travel 203 Km if he travels with the speed of the fourth day.**

A. 7 hours B. 8 hours C. 6 hours D. 5.5 hours E. None of these

**9.** [Set 1 of 2] A tank is filled up to 2/5th of the capacity of tank with the mixture of two liquids, type A and type B in the ratio of 3 : 2. The tank has two inlet pipes i.e., one for type A liquid and other for type B liquid. Inlet of type A liquid and inlet of type B liquid can fill the same tank in 18 h and 12 h respectively. The capacity of the tank is 250 litres.

**If both the inlet pipes are opened simultaneously, then what will be the final ratio of type A liquid and type B liquid in the completely filled tank?**

A. 14 : 15 B. 12 : 13 C. 11 : 13 D. 13 : 14 E. None of these

**10.** [Set 1 of 2] A tank is filled up to 2/5th of the capacity of tank with the mixture of two liquids, type A and type B in the ratio of 3 : 2. The tank has two inlet pipes i.e., one for type A liquid and other for type B liquid. Inlet of type A liquid and inlet of type B liquid can fill the same tank in 18 h and 12 h respectively. The capacity of the tank is 250 litres.

**If the capacity of tank were 300 litres, then in how much time inlet of type B liquid can fill the empty tank?**

A. 14 h B. 15 h C. 16.9 h D. 14.4. h E. None of these

**Correct Answers:**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|
| B | B | A | D | B | D | A | A | B | D |

**Explanations:**

**1.** Sonu : Titu : Sweety

(120000 × 4 + 200000 × 8) : (70000 × 5 + 100000 × 7) : (400000 × 2)

208 : 105 : 80

Now,

12.5% of 1572000 = 196500

Therefore, Profit of:

Sonu = $\frac{208}{393}$ × 196500 = Rs. 104000

Titu = $\frac{105}{393}$ × 196500 = Rs. 52500

Sweety = $\frac{80}{393}$ × 196500 = Rs. 40000

Hence, option B is correct.



**2.** SI for 2 years = Rs.2000
SI for 1 year = Rs.1000
In the 2nd year Rs.50 is added in CI which is 5% of 1000
Hence, R = 5%
⇒ 5% = 1000
⇒ 100% = 20000
Sum = Rs.20000
CI for 3 years = 20000 $\left(\frac{105}{100}\right)^3$ – 20000

⇒ 23152.5 – 20000
⇒ 3152.5
Required ratio = 2050 : 3152.5
⇒ 20500 : 31525
⇒ 820 : 1261
Hence, option B is correct.

**3.** Let time taken by 4 employees and 4 trainees together is 'x'.
Let one day work of one employee and one trainee is 'E' and 'T' respectively.
Total work = 7 × (2E + 3T) = 2 × (6E + 13T)
⇒ 14E + 21T = 12E + 26T
⇒ 2E = 5T **…… (1)**
Total work done by 4 employees and 4 trainees together in 'x' days = x × (4E + 4T) = 2 × (6E + 13T)
From equation (1)-
⇒ x × (10T + 4T) = 2 × (15T + 13T)
⇒ $x = \frac{56T}{14T}$ = 4 days

Hence, option A is correct.

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**4.** Let Meenu has Rs x
For simplification, x = LCM (40, 90) = 360
Thus, price of one book = $\frac{360}{40}$ = Rs. 9

Similarly, price of one pen = $\frac{360}{90}$ = Rs. 4
Now, amount left after keeping money for food = Rs. (360 – 20% of 360) = Rs. 288
Price of 36 pens, P = 4 × 36 = Rs. 144
Amount left = Rs. (288 – 144) = Rs. 144
Therefore, No. of books Meenu buys = $\frac{144}{9}$ = 16
Hence, option D is correct.



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**5.** P (getting at least 2 heads) = 1 – P (getting no head or exactly one head)
P (getting no head) = P (getting all tails) = $\frac{1}{16}$

Now, P(exactly one head) :
Getting exactly one head means 3 tails and 1 head in any order and the total occurrences here are = $\frac{4!}{3!}$ = 4

Therefore, P(getting exactly one head) = $\frac{4}{16} = \frac{1}{4}$

Hence, P(getting at least 2 heads)
= $1 - \left(\frac{1}{16} + \frac{1}{4}\right) = \frac{11}{16}$

Hence, option B is correct.

**6.**

Quantity of type A milk = $24 \times \frac{7}{12} = 14$ liters

Quantity of type B milk = $24 \times \frac{5}{12} = 10$ liters

SP of mixture = 24 × 56 = Rs.1344

CP of mixture when sold at 12% profit

$= 1344 \times \frac{100}{112} = Rs.1200$

CP of type A milk = 14 × 45 = Rs.630
CP of type B milk = Rs. (1200 – 630) = Rs.570

Per liter CP of type B milk = $\frac{570}{10}$ = Rs. 57

Hence, option D is correct.

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**7.** Bhuvan's age = 12 years

Arjun's age = 12 – 2 = 10 years

Let Shanju's age be 'x' years

Then, according to question-

$\Rightarrow \frac{x - 10}{6} = 10$

$\Rightarrow X - 10 = 60$

$\Rightarrow X = 70$

Required ratio = Arjun: Bhuvan: Shanju

⇒10 : 12 : 70

⇒ 5 : 6 : 35

Hence, option A is correct.'

**8.** Let, Speed on the fourth day = x
total speed for the first three days = A
& total speed for the last three days = B
Now,
Total speed for the week, S = 47 × 7 = 329
Total speed for the first four days = A + x = 37 × 4 = 148
Total speed for the last four days = B + x = 52.5 × 4 = 210
According to the question,
A + x + B = S
⇒ (A + x) + (B + x) – x = 329
⇒ 148 + 210 – x = 329
⇒ x = 358 – 329
⇒ x = 29Km/h

Therefore, time taken to travel 203km = $\frac{203}{29}$ = 7 hours

Hence, option A is correct.

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**9.**

Initially type A liquid = $\frac{2}{5} \times 250 \times \frac{3}{5}$ = 60L

Type B liquid = $\frac{2}{5} \times 250 \times \frac{2}{5}$ = 40 L



Remaining capacity of tank = 250 – 60 – 40 = 150 L

Ratio of Efficiency of both the inlet pipes = $\frac{1}{18} : \frac{1}{12}$ = 2 : 3

In remaining tank-

Amount of type A liquid = $150 \times \frac{2}{2+3}$ = 60L

Amount of type B liquid = 150 – 60 = 90 L
Total A type liquid = 60 + 60 = 120 L
Total type B liquid = 40 + 90 = 130 L
Required ratio = 120 : 130 = 12 : 13
Hence, option (B) is correct.

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**10.** To fill 250 L inlet of type B liquid takes 12h.

So, to fill 300 L time taken by inlet of type B liquid = $12 \times \frac{300}{250}$ = 14.4 h

Hence, option (D) is correct.