

SBI Clerks

Quantitative Aptitude

Directions (Q.1-5): What should come in place of question mark (?) in the following questions?

- $12 \frac{1}{2} - \left[4 \frac{1}{2} - \left\{ 3 - \left(2 - \frac{1}{2} \right) \right\} \right] = ?$
 1) $3 \frac{1}{2}$ 2) $10 \frac{1}{2}$ 3) $9 \frac{1}{2}$
 4) $9 \frac{1}{4}$ 5) None of these
- $\sqrt[3]{6^3 \times 2^2 - 5 \times 2 - 5^2} = 9$
 1) 2 2) 3 3) 5 4) 4 5) None of these
- $666.06 + 66.60 + 0.66 + 6.06 + 6.66 = ?$
 1) 756.06 2) 878.95 3) 746.04
 4) 712.37 5) None of these
- $\frac{14 \times \sqrt{?}}{48} = \frac{56}{3}$
 1) 64 2) 8 3) 128
 4) 4096 5) None of these
- $3 + \frac{1}{2 - \frac{3}{5 + \frac{1}{4 - \frac{1}{4}}}} = ?$
 1) $3 \frac{29}{48}$ 2) $6 \frac{13}{21}$ 3) $5 \frac{19}{48}$
 4) $8 \frac{29}{48}$ 5) None of these
- What is the reciprocal of the sum of the reciprocals of $\frac{3}{5}$ and $\frac{2}{3}$?
 1) $\frac{19}{15}$ 2) $\frac{15}{19}$ 3) $\frac{6}{19}$
 4) $\frac{9}{16}$ 5) None of these
- Vijay spends $\frac{1}{8}$ th part of his monthly salary on rent, $\frac{1}{4}$ th part of the remaining on household expenses and spends $\frac{1}{7}$ th part of the remaining on buying cloths. If he was left with Rs.2160, find his monthly salary.
 1) Rs.4320 2) Rs.3140 3) Rs.6400
 4) Rs.3240 5) None of these
- Two dice are thrown simultaneously. What is the probability that the sum is 5 or 8?
 1) $\frac{5}{9}$ 2) $\frac{1}{4}$ 3) $\frac{1}{3}$
 4) $\frac{13}{36}$ 5) None of these
- Find the greatest number of three digits which when divided by 9, 12 and 18 leaves remainder of 5 in each case.
 1) 972 2) 967 3) 977
 4) Can't be determined 5) None of these

Remember, that it may be necessary to "solve" for additional information in a problem before being able to arrive at the final answer. These questions test your ability to recognize what information is needed to arrive at an answer.

If time permits, go back and solve the more difficult problems once again. If these "new" answers are the same as your previous answers, chances are good that your solution is correct.

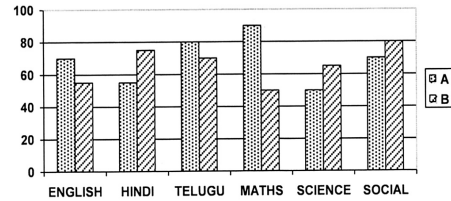


What is his overall profit percent?

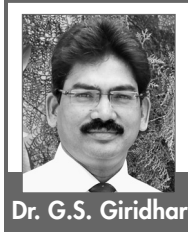
10. A dishonest cloth merchant claims that he sells goods at 20% profit but he uses 90 cm for one metre scale. What is his overall profit percent?

- $13 \frac{1}{9}\%$ 2) $33 \frac{1}{3}\%$ 3) $12 \frac{1}{6}\%$
 4) $11 \frac{1}{9}\%$ 5) None of these

Directions (Q. 11-15): Study the following graph carefully to answer the questions that follow. Following graph gives the marks of two students A and B in six subjects.



- The marks of A in Social are approximately what percent of the marks of B in English?
 1) 85% 2) 75% 3) 125%
 4) 100% 5) 140%
- The marks of B in Social are same as the marks of A in which of the following pairs of subjects?
 1) Maths 2) Hindi 3) Science
 4) Telugu 5) English
- In how many subjects did B get more marks than the average of all the subjects?
 1) 4 2) 3 3) 2
 4) 5 5) None of these
- What is the respective ratio of the marks of B in Science and A in Hindi?
 1) 9 : 8 2) 11 : 6 3) 8 : 13
 4) 11 : 13 5) None of these
- Find the difference between the average marks of A and B?
 1) 4.15 2) 2.75 3) 1.54 4) 3.33 5) 4.27



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Directions (Q. 16-18): In each of the following number series questions one number is wrong. You have to identify that number.

- 18 163 285 385 468 533
 1) 468 2) 18 3) 385 4) 163 5) 533
- 6 14 52 249 1487 10401
 1) 1487 2) 249 3) 10401 4) 52 5) 14
- 8000 3200 1280 512.4 204.8 81.92
 1) 81.92 2) 512.4 3) 3200
 4) 204.8 5) 8000
- Find the biggest of the fractions $\frac{4}{7}, \frac{9}{13}, \frac{3}{5}, \frac{5}{8}$ and $\frac{6}{11}$
 1) $\frac{3}{5}$ 2) $\frac{5}{8}$ 3) $\frac{4}{7}$ 4) $\frac{9}{13}$ 5) $\frac{6}{11}$

20. Arun started a business by investing Rs.2100 and after 3 months Bhanu joined him with Rs.3500. At the end of the year if they receive a profit of Rs.5400, find Bhanu's share in it?

- Rs.3300 2) Rs.2400 3) Rs.2800
 4) Rs.3000 5) None of these

Key				
1) 3	5) 1	9) 3	13) 2	17) 4
2) 2	6) 3	10) 2	14) 5	18) 2
3) 3	7) 5	11) 3	15) 4	19) 4
4) 4	8) 2	12) 4	16) 3	20) 4

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Explanations

- $12 \frac{1}{2} - \left[4 \frac{1}{2} - \left\{ 3 - \left(2 - \frac{1}{2} \right) \right\} \right] = ?$
 $\Rightarrow 12 \frac{1}{2} - \left[4 \frac{1}{2} - \left\{ 3 - 1 \frac{1}{2} \right\} \right]$
 $\Rightarrow 12 \frac{1}{2} - \left[4 \frac{1}{2} - 1 \frac{1}{2} \right]$
 $\Rightarrow 12 \frac{1}{2} - 3 = 9 \frac{1}{2}$
- $\sqrt[3]{6^3 \times 2^2 - 5 \times 2 - 5^2} = 9$
 $\Rightarrow 216 \times 4 - 10 - 5^2 = 9^3 = 729$
 $\Rightarrow 854 - 729 = 5^2$
 $\Rightarrow 125 = 5^2 \Rightarrow 5^3 = 5^2 \Rightarrow ? = 3$
- $\frac{14 \times \sqrt{?}}{48} = \frac{56}{3}$
 $\Rightarrow \sqrt{?} = \frac{56 \times 48}{14 \times 3} = 64$
 $\Rightarrow ? = 64^2 = 4096$
- $3 + \frac{1}{2 - \frac{3}{5 + \frac{1}{4 - \frac{1}{4}}}} = ?$
 $\Rightarrow 3 + \frac{1}{2 - \frac{3}{5 + \frac{1}{5 + \frac{4}{5}}}}$
 $\Rightarrow 3 + \frac{1}{2 - 2 \times \frac{5}{29}} = 3 + \frac{1}{\frac{48}{29}} = 3 \frac{29}{48}$
- Sum of reciprocals of $\frac{3}{5}$ and $\frac{2}{3}$ is
 $\frac{5}{3} + \frac{3}{2} = \frac{19}{6}$
 \therefore Reciprocal of $\frac{19}{6}$ is $\frac{6}{19}$
- Let his monthly salary be Rs.1
 Remaining salary after rent = $1 - \frac{1}{8} = \frac{7}{8}$
 Remaining salary after household exp.
 $= \frac{3}{4} \times \frac{7}{8} = \frac{21}{32}$
 Remaining salary after cloths
 $= \frac{6}{7} \times \frac{21}{32} = \frac{18}{32}$
 Actual remaining salary was Rs.2160
 \therefore Actual Salary = $2160 \times \frac{32}{18} = \text{Rs.3840}$

Shortcut:

- Let his monthly salary be Rs. x
 $\therefore \left(1 - \frac{1}{8} \right) \left(1 - \frac{1}{4} \right) \left(1 - \frac{1}{7} \right) \times x = 2160$
 $\Rightarrow \frac{7}{8} \times \frac{3}{4} \times \frac{6}{7} \times x = 2160$
 $\Rightarrow x = \text{Rs. 3840}$
- 8.** Total number of possibilities when two dice are thrown is $6^2 = 36$

Number of possibilities to get 5 is 4 [(1, 4), (2, 3), (3, 2) and (4, 1)]
 Number of possibilities to get 8 is 5 [(2, 6), (3, 5), (4, 4), (5, 3) and (6, 2)]
 \therefore Probability = $\frac{4+5}{36} = \frac{1}{4}$

Shortcut:

Remember the following table for two dice.

To Get	2	3	4	5	6	7	8	9	10	11	12
Possibilities	1	2	3	4	5	6	5	4	3	2	1

- LCM of 9, 12 and 18 is 36.
 When we divide 999 by 36, remainder is 27. (999 is 3 digit biggest number)
 Greatest three digit number divisible by 36 is $999 - 27 = 972$.
 To get remainder as 5, the required number is $972 + 5 = 977$
- Convert total profit in centimetres
 By using 90 cm instead of original 100 cm, he gains 10 cm. 20% profit is 20 cm
 His total profit = $10 + 20 = 30$ cm
 \therefore Profit % = $\frac{30}{90} \times 100 = 33 \frac{1}{3}\%$
- Required percent = $\frac{70}{55} \times 100 = 127.27\%$
- Average marks of
 $B = \frac{55+75+70+50+65+80}{6} = \frac{395}{6} = 65.83$
 3 subjects i.e., Hindi, Telugu and Social are above average
- Marks of B in Science = 65
 Marks of A in Hindi = 55
 Ratio = $65 : 55 = 13 : 11$
- Average marks of A = $\frac{415}{6}$
 Average marks of B = $\frac{395}{6}$
 Difference = $\frac{415}{6} - \frac{395}{6} = \frac{20}{6} = 3.33$
- $18 + 12^2 + 1 = 163$
 $163 + 11^2 + 1 = 285$
 $285 + 10^2 + 1 = 386$
 $386 + 9^2 + 1 = 468$
 $468 + 8^2 + 1 = 533$
- $6 \times 3 - 4 = 14$; $14 \times 4 - 5 = 51$
 $51 \times 5 - 6 = 249$; $249 \times 6 - 7 = 1487$
 $1487 \times 7 - 8 = 10401$
- $8000 \times 2 + 5 = 3200$
 $3200 \times 2 + 5 = 1280$
 $1280 \times 2 + 5 = 512$
 $512 \times 2 + 5 = 204.8$
 $204.8 \times 2 + 5 = 81.92$
- $\frac{4}{7}, \frac{9}{13}, \frac{3}{5}, \frac{5}{8}$ and $\frac{6}{11}$
 Comparing $\frac{4}{7}$ and $\frac{9}{13}$
 $4 \times 13 = 52$ and $9 \times 7 = 63$. $\therefore \frac{9}{13}$ is bigger.
 Comparing $\frac{9}{13}$ and $\frac{3}{5}$
 $9 \times 5 = 45$ and $3 \times 13 = 39$. $\therefore \frac{9}{13}$ is bigger.
 Comparing $\frac{9}{13}$ and $\frac{5}{8}$
 $9 \times 8 = 72$ and $5 \times 13 = 65$. $\therefore \frac{9}{13}$ is bigger.
 and comparing $\frac{9}{13}$ and $\frac{6}{11}$
 $9 \times 11 = 99$ and $6 \times 13 = 78$. $\therefore \frac{9}{13}$ is bigger.
 $\therefore \frac{9}{13}$ is the biggest of all the fractions
- $2100 \times 12 : 3500 \times 9 = 4 : 5$
 Bhanu's share = $\frac{5}{9} \times 5400 = \text{Rs.3000}$

ఉద్యోగాలు

కృషి విజ్ఞాన కేంద్రం

మెడక్ జిల్లాలోని డెక్కన్ డెవలప్‌మెంట్ సొసైటీ - కృషి విజ్ఞాన కేంద్రం కింది పోస్టుల భర్తీకి దరఖాస్తులు కోరుతోంది.

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★ దరఖాస్తు: పూర్తి బయోడేటా, అర్హతలకు సంబంధించిన నకలు కాపీలను పోస్టు ద్వారా పంపాలి.

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