

ZUPPEE GRAND TEST #1

Reward: 3000 INR

Passing criteria: >=70%

Please submit the roughwork to rameshsinha123@yahoo.com

(4) What least number when divided by 36, 24 and 16 leaves 11 as remainder in each case?

(7) The ratio of two numbers is 5 : 6 and their LCM is 480, then their HCF is

(12) 5 clocks ring automatically at intervals of 12 minutes, 8 minutes, 3 minutes, 4 minutes and 10 minutes, respectively. In 8 hours from the moment they start, how many times will they ring together?

(1) Find value of $M - \frac{1}{M}$, if $M + \frac{1}{M} = 4$?

(7) What is value of $(13.8 \times 1.9 \div 5.7 + 11.2 \text{ of } \frac{1}{16} - \frac{1}{20})$?

(8) What will be value of $(m+n)$ if we know that $\sqrt{28 - 6\sqrt{3}} = \sqrt{3}m + n$?

(9) On simplification of the following, the result will be

$(1 - \frac{1}{2})(1 - \frac{1}{3})(1 - \frac{1}{4}) \dots \dots (1 - \frac{1}{100})$?

(4) What will be $(0.\overline{15268} \div 0.\overline{45804})$?

(11) What is approximate value of $8459 \div 11.98 - 23.99 \div \frac{7}{140}$?

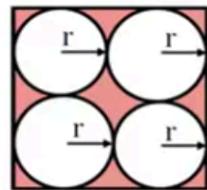
(13) Which of the following is largest fraction amongst $\frac{5}{8}, \frac{3}{7}, \frac{2}{9}, \frac{4}{5}$?

(1.) The length of a rectangle is increased by 40% and the breadth is decreased by 40%. What will be the change in the area?

ii.) By what percent should the breadth be increased to maintain the same area, if the decrease in length is 40%?

(3.) How many minimum number of square tiles are needed to cover a rectangular floor of dimension 5.25m and 5.10m completely?

(6) Find the area of the shaded portion of the given figure.
Given, $r = 7\text{cm}$



Q2. 2 cylinders have their radii into ratio 4:7. If their heights are in the ratio of 21:8 then their volumes would be in what ratio?

Q3. Ramesh, a fabricator, has a metal sheet with dimensions 15 cm X 10 cm. Squares with a side 2 cm are cut from each of the four corners. The sheet is then folded to form a planter with a depth 2cm. What will be the volume of this planter?



Q6. A solid metallic box with dimension l , b and h respectively weighs 50 kg . What will be the change in the weight, if all the dimensions of the box are halved?

(4) If price of rice is 30% less than that of wheat, then price of wheat is how much per cent more than that of rice?

(5) The price of apple is first increased by 10% and then decreased by 10%. What is the change in the price of apple?

(7) Y has to score 40% marks to pass. He gets 20 marks and fails by 40 marks. The maximum marks of the exam are?

(9) In a class, 15% of total number of students failed in Science, 25% of total number of students failed in Maths and 10% of total number of students failed in both. How much percentage of students passed in both Maths and Science?

(10) By 20% decrease in the price of rice, people can buy 10 kg more rice in Rs. 100. What is the original price of 1 kg of rice?

(12) In a country 55% population is female. 80% of the male population is literate. How much of females are literate if total literacy is 58%?

(4) How much milk should be added in a milk solution to make milk quantity in it 75%, if 80 L of milk solution has 45% milk in it?

(5) A pot contains 40 litres of juice. How much juice will be there in the pot, if 4 litres of juice was removed and was replaced by water and this process was again repeated twice?

(6) One glass has juice and water in the ratio 5:2 while other glass has them in ratio 7:4, respectively. If both glasses poured in a vessel, then what will be final ratio of water to juice in the vessel?

(9) 3 types of Sugar got mixed by accident in a shop. First was of the rate Rs. 145 per kg and Second of Rs. 165 per kg. Only thing the shop owner knew that quantities of 3 sugar types were in the ratio 2:1:3 respectively. He finally sold the mix at rate of Rs. 180 per kg. What was price of 3rd type?

(6) Income ratio of Ramesh and Suresh is 5:6. Their spending ratio is 7:9. Ramesh saves Rs. 4000 and Suresh saves Rs. 3000. Income and spending respectively of Ramesh and Suresh are?

(10) Ratio of two numbers is 3:8. On adding 5 to both numbers, the ratio becomes 2:5. Which is the smaller number out of the two?

(12) Price of each article of type P, Q, and R is Rs. 300, Rs. 180 and Rs. 120 respectively. Suresh buys articles of each type in the ratio 3:2:3 in Rs. 6480. How many articles of type Q did he purchase?

(4) P and Q can do a work in 12 days. Q and R can do the same work in 16 days, and R and P can do it in 24 days. Find the time in which P, Q and R can finish the work together?

(5) P can do a work in 30 days. Q is 25% more efficient than P in completing the same work. In how many days will Q complete the work?

(6) If 3 men can do a work in 2 days and 4 boys can do the same work in 6 days, then in how many days will the same work be completed by 8 men and 8 boys?

(7) Sita and Gita can do a work in 20 days and 25 days, respectively. Both begin together but after a few days, Sita leaves. Then Gita finishes the remaining work in 10 days. After how many days did Sita leave?

(1) A boy increases his speed to $\frac{9}{5}$ times of his original speed. By this he reaches his school 30 minutes before the usual time. How much time does he takes usually?

(3) P, Q and R are in a cycle race of 4500 meters. P cycles twice as fast as Q. R cycles $\frac{1}{3}$ rd as fast as Q. R completes the race in 45 minutes. Then where was Q from the finishing line when P finished the race?

(3) Uma wants to gain 15% profit on her sale of sugar. She buys 120 kg of sugar at Rs. 24 per kg to mix with 180 kg of sugar bought at Rs. 28 per kg. She sells the sugar mix at

(5) Ramesh gets a profit of 20% in one trade and suffers a loss of 20% in the second when he sells 2 cycles for Rs. 4000 each. What is his profit or loss in the entire trade?

(6) Simran bought pet food worth Rs. 56000. She then sold 1/3rd of it incurring a loss of 40%. What profit she must earn on rest of the supplies to nullify this loss?

QUESTION (3) -

Rohan is as much younger than Ajay as he is older than Meena. The sum of ages of Ajay and Meena is 108 years. How old is Rohan?

QUESTION (6) -

The average age of 10 students and their teacher is 15 years. The average age of the first seven students is 15 years and that of the last three is 11 years. What is the teacher's age?

Q3. The ratio of 2nd to 7th term of an AP is 1:3. 4th term is 9. Find 15th term. Find the AM of this A.P with 15 terms.

Q7. Find the sum of the series: $3 + 33 + 333 + 3333 + \dots$ *n terms*

Q6. Find the sum of $11 + 103 + 1005 + 10007 + \dots$ up to n terms.

(4) A pot has 2 white, 6 black, 4 grey and 8 green balls. If one ball is picked randomly from the pot, what is the probability of it being black or green?

(8) A box has 6 black, 4 red, 2 white and 3 blue shirts. What is the probability that 2 red shirts and 1 blue shirt get chosen during a random selection of 3 shirts from the box?

(9) A box has 6 black, 4 red, 2 white and 3 blue shirts. What is probability of picking at least 1 red shirt in 4 shirts that are randomly picked?

Q1. What was the day on 6th April 1896?

Q2. What was the day on 25th June 1983?

Q3. Jan 1, 2001 was Monday, what was the day on Dec 31, 2002? ✓

(2) What will be angle between the two hands of a clock at 10.25 pm?

(4) If the minute hand of a clock has moved 300°, how many degrees has the hour hand moved?

(8) A clock loses 5 minutes every hour and was set right at 11AM on a Monday. When will it show the correct time again?

(9) My watch, which gains uniformly, is 2 minutes behind at noon on Sunday, and is 4 min 48 seconds ahead at 2pm on the following Sunday. When was it correct?

(5) 1/5 part of an amount was given at 3% simple interest, 1/3 part was given at 5% simple interest, 2/5 parts at 9% simple interest and remaining part at 11% simple interest. The total interest received was Rs. 297. How much amount was originally given?

(7) If simple interest on a certain sum for 15 months at 7(1/2) % per annum exceeds the simple interest on the same sum for 8 months at 12(1/2)% per annum by Rs. 32.50, then the sum (in Rs.) is..

(8) If simple interest for 2 years for a sum is Rs. 600 and compound interest for the same sum for 2 years and same rate of interest is Rs. 645, what will be the rate of interest?

(1) What will be the interest earned on sum of Rs. 6400 kept for 6 months at 25% interest rate compounded quarterly?

(3) How much money invested at compound interest will yield Rs. 6350.40 at the end of 3 years? For the first year the rate of interest is 5%; for second year it increases to 12% and for third year it decreases to 8%.

(4) An amount becomes 4 times in 6 years. In how many years will it become 64 times if the rate of interest remains unchanged?

(8) The population of a city is 50,000 at present. It increases at the rate of 10% per annum. What was its population 4 years ago from present?

(9) What will be difference in population 3 years ago and 2 years ago of Devon village, whose current population is 100000 and which is increasing at a rate of 25% every year?

(10) The difference between simple and compound interest on a certain sum of money for 2 years at 4 percent per annum is Re. 1. The sum of money is?