

## Math Paper Test 7

**1. The average age of a father, mother, and their son is 30 years. If the ratio of the ages of the father and mother is 6:5, and the son is 24 years old, find the mother's age.**

1.36 years   2.30 years   3.40 years   4.25 years   5.28 years

**2. A 60-liters mixture contains milk and water in the ratio 3:2. How much water should be added to the mixture so that the ratio of milk to water becomes 1:1?**

1.10 liters   2.15 liters   3.12 liters   4.8 liters   5.18 liters

**3. Ravi sold a bicycle for Rs. 3240. He would have earned a profit of 8%. Find the cost price.**

1.Rs. 2,800   2.Rs. 3,200   3.Rs. 2,500   4.Rs. 3,000   5.Rs. 3,100

**4. Machine A produces 10 parts in 20 minutes and machine B produces 15 parts in 1 hour. How many total parts will both machines produce in 4 hours?**

1.150   2.180   3.160   4.200   5.140

**5. In a school of 200 students, 20% are interested in Music. 1/4 of the remaining are interested in Art. Find the number of students not interested in these two activities.**

1.120   2.150   3.140   4.110   5.130

**Study the following information carefully and answer the questions given below.**

The following table shows the number of mobile phones sold by two different companies, Realme and Oppo, over five consecutive months in 2025.

Month	Number of Realme phones Sold	Number of Oppo phones Sold
January	450	320
February	540	480
March	600	550
April	420	500
May	750	650

**6. What is the ratio of the number of Realme phones sold in January to the number of Oppo phones sold in February?**

1.15 : 16   2.12 : 11   3.14 : 13   4.15 : 14   5.13 : 16

**7. The number of Oppo phones sold in April is what percentage of the number of Realme phones sold in May?**

1.33.33%   2.45%   3.66.66%   4.25%   5.30%

**8. What is the average number of Oppo phones sold in March and April?**

1.505   2.500   3.525   4.515   5.520

**9. If the number of Oppo phones sold in June is 20% more than that in May, find the number of Oppo phones sold in June.**

1.750   2.800   3.720   4.780   5.820

**10. If the selling price of each Realme phone is ₹12,000, find the total revenue (in lakhs) of Realme in April.**

1.₹50.4 Lakhs   2.₹48.2 Lakhs   3.₹52.6 Lakhs   4.₹45.8 Lakhs   5.₹51.2 Lakhs

**What value will come in place of the question mark (?) in the following question?**

**11. 70% of 1610 + 1553 = ? \* 2**

1.1340   2.1320   3.1350   4.1312   5.1335

**12. (11/5) \* 350 \* (90 ÷ 15) = ? of 2310**

1.5   2.3   3.2   4.1   5.6

**13. √676 + 2611 = ? \* 2 + 37**

1.1400   2.1300   3.1200   4.1600   5.1800

**14. 4620 + 760 ÷ 4 = ? of 250%**

1.1924   2.1920   3.1950   4.1900   5.1910

**15.  $\Rightarrow 4\frac{2}{5} \times 5\frac{1}{11} \times \frac{45}{8} = ? \times 2$**

1.63   2.12   3.49   4.56   5.42

**16. 35 \* 5 + 66 ÷ 0.6 = 316 - ?**

1.35   2.42   3.28   4.31   5.25

**17. 200% of ? + 80% of 120 = 17<sup>2</sup> - 9**

1.85   2.92   3.100   4.95   5.88

**18. 9240 ÷ ? = 12<sup>2</sup> + 186**

1.32   2.25   3.28   4.30   5.24

**19. 15<sup>2</sup> + 141 = ?<sup>3</sup> + 11.5 \* 2**

1.7   2.3   3.8   4.12   5.18

**20. (9/126) \* 7 \* ? = 81/6**

1.37   2.27   3.25   4.35   5.45

**21. [8]<sup>3</sup>% of (√225 + 85) = ? \* 4<sup>2</sup>**

1.32 2.28 3.24 4.36 5.16

22.  $\sqrt[3]{1728} \div 18 * 81 = ? + 17$

1.27 2.21 3.37 4.31 5.17

23.  $(4^3)^2 \div 64 * 8^3 = ?^{15}$

1.4 2.8 3.1 4.3 5.2

24.  $(4/17) * (153/7) = ?^2/7$

1.4 2.6 3.9 4.3 5.2

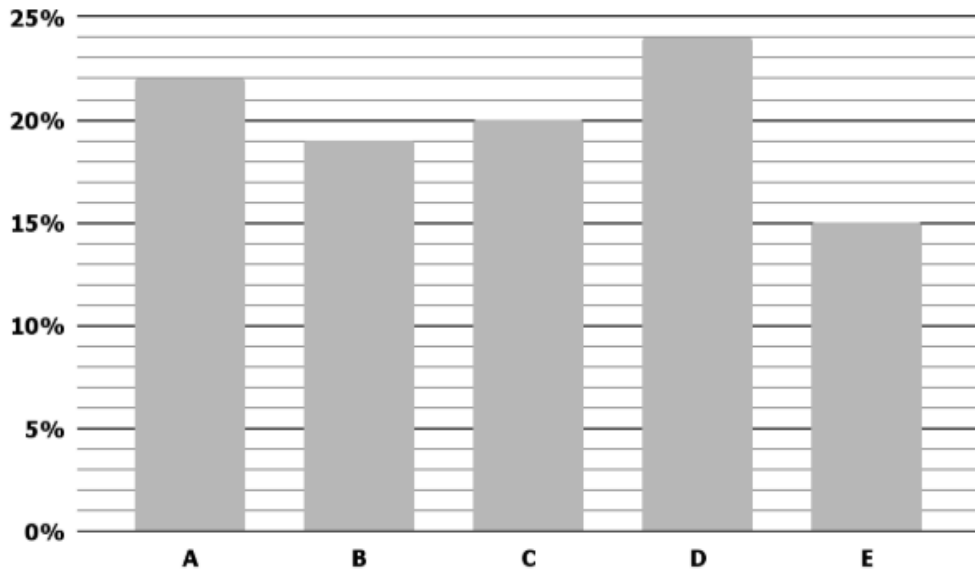
25.  $9 * ? + 82 - 37 = 378$

1.31 2.21 3.27 4.41 5.37

**Study the following information carefully and answer the questions given below.**

The bar graph given below shows the percentage distribution of the number of people living in each village out of the total number of people living in all five villages together.

**The percentage distribution of the number of people living**



**Note:** The total number of people living in five villages together is 2500.

26. What is the difference between the number of people living in villages A and E?

1.125 2.150 3.175 4.100 5.140

27. If the number of females living in village B is 48% of the total number of people living in the same village, find the difference between the number of males and females living in village B.

**Note:** Only males and females live in the village.

1.19 2.22 3.35 4.41 5.11

28. If the ratio of children to adults living in Village C is 2:3, find the number of adults living in village C.

1.240 2.150 3.360 4.90 5.300

29. If the number of people living in village G is 20% less than that in village D. What is the average number of people living in villages A and G together?

1.505 2.525 3.495 4.515 5.485

30. The number of people living in village A is what percentage more or less than the number of people living in village C?

1.10% less 2.20% more 3.5% more 4.5% less 5.10% more

31. The income of A is 120% of the income of B and the expenditure of A is 80% of his own income. If B's income is Rs. 25,000, find the savings of A.

1.Rs. 5,000 2.Rs. 4,500 3.Rs. 6,000 4.Rs. 5,500 5.Rs. 6,500

32. A, B and C invested ₹20,000, ₹30,000 and ₹40,000 respectively to start a business. At the end of one year, they earned a total profit of Rs. 54,000. What will be B's share in the profit?

1.Rs. 12,000 2.Rs. 18,000 3.Rs. 24,000 4.Rs. 15,000 5.Rs. 20,000

33. The average weight of a group of 25 students is 50 kg. If the weights of two students were misread as 36 kg and 44 kg instead of the actual weights of 42 kg and 58 kg respectively, what would be the correct average weight?

1.50.8 kg 2.51.2 kg 3.50.4 kg 4.51.5 kg 5.50.2 kg

34. What will be the simple Interest accrued on an amount of ₹20,000 at 12% p.a. in nine years?

1.Rs. 18400 2.Rs. 21600 3.Rs. 20400 4.Rs. 24600 5.Rs. 19600

35. A train started its journey from Station X and reached Station Y in 60 minutes at its average speed of 60 kmph. If the average speed of the train is increased by 15 kmph, how much time will it take to cover the same distance?

1.45 minutes 2.52 minutes 3.40 minutes 4.48 minutes 5.50 minutes

**1. Answer: B**

Sum of ages of Father, Mother and Son =  $30 * 3 = 90$  years

Sum of ages of Father and Mother =  $90 - 24 = 66$  years

Ratio of Father : Mother =  $6 : 5$

Total ratio parts =  $6 + 5 = 11$

Mother's age =  $(5 / 11) * 66$

Mother's age =  $5 * 6 = 30$  years

Hence, the correct answer is option B.

**2. Answer: C**

Quantity of milk =  $(3 / 5) * 60 = 36$  liters

Quantity of water =  $(2 / 5) * 60 = 24$  liters

To make the ratio 1:1, quantity of water must equal quantity of milk (36 liters)

Water to be added =  $36 - 24 = 12$  liters

Hence, the correct answer is option C.

**3. Answer: D**

Selling Price (SP) = Rs. 3240

This ₹3,240 is 108% of Cost Price (since profit is 8%)

Cost Price =  $(3,240 / 108) * 100 = 30 * 100 =$  Rs. 3,000

Hence, the correct answer is option D.

**4. Answer: B**

Parts by Machine A in 1 hour =  $(10 / 20) * 60 = 30$  parts

Parts by Machine B in 1 hour = 15 parts

Total parts by both in 1 hour =  $30 + 15 = 45$  parts

Total parts in 4 hours =  $45 * 4 = 180$  parts

Hence, the correct answer is option B.

**5. Answer: A**

Students in Music = 20% of 200 = 40

Remaining students =  $200 - 40 = 160$

Students in Art =  $1/4$  of 160 = 40

Students not interested =  $160 - 40 = 120$

Hence, the correct answer is option A.

**{6 – 10}**

Solution

**6. Answer: A**

⇒ The required ratio =  $450 : 480 = 15 : 16$

Hence, the correct answer is option A.

**7. Answer: C**

⇒ The required percentage =  $(500/750) * 100 = 66.66\%$

Hence, the correct answer is option C

**8. Answer: C**

⇒ The total phone sold by Oppo (Mar + Apr) together =  $(550 + 500) = 1050$

⇒ Average =  $1050/2 = 525$

Hence, the correct answer is option C.

**9. Answer: D**

The number of Oppo phones sold in June =  $120\%$  of 650 =  $(120 / 100) * 650 = 1.2 * 650 = 780$

650 = 780

Hence, the correct answer is option D.

**10. Answer: A**

⇒ Total number of Realme phones sold in April = 420

⇒ Price per phone = ₹12,000

⇒ Total Revenue =  $420 * 12,000$

⇒ Total Revenue = ₹5,040,000

⇒ Revenue in Lakhs =  $5,040,000 / 100,000 = ₹50.4$  Lakhs

Hence, the correct answer is option A.

**11. Answer: A**

⇒  $70\% * 1610 + 1553 = ? * 2$

⇒  $1127 + 1553 = ?$

⇒  $2680 = ? * 2$

⇒  $? = 1340$

Hence, the correct answer is option A.

**12. Answer: C**

⇒  $(11/5) * 350 * (90 \div 15) = ?$  of 2310

⇒  $11 * 70 * 6 = ? * 2310$

⇒  $770 * 6 = ? * 2310$

⇒  $? = 2$

Hence, the correct answer is option C.

**13. Answer: B**

⇒  $\sqrt{676} + 2611 = ? * 2 + 37$

⇒  $26 + 2611 = ? * 2 + 37$

⇒  $2637 - 37 = ? * 2$

⇒  $? = 2600 / 2$

⇒  $? = 1300$

Hence, the correct answer is option B.

**14. Answer: A**

⇒  $4620 + 760 \div 4 = ?$  of 250%

⇒  $4620 + 190 = ? * 250\%$

⇒  $? = 4810 \div 2.5$

⇒  $? = 1924$

Hence, the correct answer is option A.

**15. Answer: A**

$$\Rightarrow 4\frac{2}{5} \times 5\frac{1}{11} \times \frac{45}{8} = ? \times 2$$

$$\Rightarrow 22/5 * 56/11 * 45/8 = ? * 2$$

$$\Rightarrow \frac{2}{5} \times \frac{56}{1} \times \frac{45}{8} = ? * 2$$

$$\Rightarrow 7 * 9 = ?$$

$$\Rightarrow ? = 63$$

Hence, the correct answer is option A.

**16. Answer: D**

$$\Rightarrow 35 * 5 + 66 \div 0.6 = 316 - ?$$

$$\Rightarrow 175 + 110 = 316 - ?$$

$$\Rightarrow 285 = 316 - ?$$

$$\Rightarrow ? = 316 - 285$$

$$\Rightarrow ? = 31$$

Hence, the correct answer is option D.

**17. Answer: B**

$$\Rightarrow 200\% \text{ of } ? + 80\% \text{ of } 120 = 17^2 - 9$$

$$\Rightarrow 2 * ? + (80/100) * 120 = 289 - 9$$

$$\Rightarrow 2 * ? + 96 = 280$$

$$\Rightarrow 2 * ? = 280 - 96$$

$$\Rightarrow 2 * ? = 184$$

$$\Rightarrow ? = 92$$

Hence, the correct answer is option B.

**18. Answer: C**

$$\Rightarrow 9240 \div ? = 12^2 + 186$$

$$\Rightarrow 9240 \div ? = 144 + 186$$

$$\Rightarrow ? = 9240 / 330$$

$$\Rightarrow ? = 924 / 33$$

$$\Rightarrow ? = 28$$

Hence, the correct answer is option C.

**19. Answer: A**

$$\Rightarrow 15^2 + 141 = ?^3 + 11.5 * 2$$

$$\Rightarrow 225 + 141 = ?^3 + 23$$

$$\Rightarrow ?^3 = 343$$

$$\Rightarrow ? = 7$$

Hence, the correct answer is option A.

**20. Answer: B**

$$\Rightarrow (9/126) * 7 * ? = 81/6$$

$$\Rightarrow (1/2) * ? = 13.5$$

$$\Rightarrow ? = 13.5 * 2$$

$$\Rightarrow ? = 27$$

Hence, the correct answer is option B.

**21. Answer: A**

$$8^3\% \text{ of } (\sqrt{225} + 85) = ? * 4^2$$

$$512\% \text{ of } (15 + 85) = ? * 16$$

$$512/100 * 100 = ? * 16$$

$$? = 32$$

Hence, the correct answer is option A.

**22. Answer: C**

$$\sqrt[3]{1728} \div 18 * 81 = ? + 17$$

$$12/18 * 81 = ? + 17$$

$$54 - 17 = ?$$

$$? = 37$$

Hence, the correct answer is option C.

**23. Answer: E**

$$(4^3)^2 \div 64 * 8^3 = ?^{15}$$

$$4^6 \div 4^3 * (2^3)^3 = ?^{15}$$

$$4^3 * 2^9 = ?^{15}$$

$$2^6 * 2^9 = ?^{15}$$

$$2^{(6+9)} = ?^{15}$$

$$2^{15} = ?^{15}$$

$$? = 2$$

Hence, the correct answer is option E.

**24. Answer: B**

$$(4/17) * (153/7) = ?^2/7$$

$$36/7 = ?^2/7$$

$$36 = ?^2$$

$$? = 6$$

Hence, the correct answer is option B.

**25. Answer: E**

$$9 * ? + 82 - 37 = 378$$

$$9 * ? + 45 = 378$$

$$9 * ? = 333$$

$$? = 37$$

Hence, the correct answer is option E.

**{26 – 30}**

Solution

Number of people living in village A = 22% of 2500 = 550

Number of people living in village B = 19% of 2500 = 475

Number of people living in village C = 20% of 2500 = 500

Number of people living in village D = 24% of 2500 = 600

Number of people living in village E = 15% of 2500 = 375

Let table

Village	Number of people living
A	550
B	475
C	500
D	600
E	375

**26. Answer: C**

Let according to the question

$$\text{Thus, difference} = 550 - 375 = 175$$

Hence, the correct answer is option C.

**27. Answer: A**

The number of females living in village B = 48% of 475 = 228

The number of males living in village B = 475 - 228 = 247

Thus, difference = 247 - 228 = 19

Hence, the correct answer is option A.

**28. Answer: E**

The number of adults living in village C = 500/5 \* 3 = 300

Hence, the correct answer is option E.

**29. Answer: D**

The number of people living in village G = 80 \* of 600 = 480

Thus, average =  $(550 + 480)/2 = 515$   
Hence, the correct answer is option D.

**30. Answer: E**

Thus, percentage =  $(550 - 500)/500 * 100 = 10\%$  more  
Hence, the correct answer is option E.

**31. Answer: C**

Income of B = ₹25,000  
Income of A = 120% of 25,000 =  $(120 / 100) * 25000 = \text{Rs. } 30,000$   
Expenditure of A = 80% of 30,000 =  $(80 / 100) * 30000 = \text{Rs. } 24,000$   
Savings of A = Income - Expenditure =  $30,000 - 24,000 = \text{Rs. } 6,000$   
Hence, the correct answer is option C.

**32. Answer: B**

Ratio of investment A : B : C =  $20000 : 30000 : 40000 = 2 : 3 : 4$   
Total ratio parts =  $2 + 3 + 4 = 9$   
B's share =  $(3 / 9) * 54000$   
B's share =  $1/3 * 54000 = \text{Rs. } 18,000$   
Hence, the correct answer is option B.

**33. Answer: A**

Total weight =  $25 * 50 = 1250 \text{ kg}$   
Sum of wrong weights =  $36 + 44 = 80 \text{ kg}$   
Sum of actual weights =  $42 + 58 = 100 \text{ kg}$   
Difference =  $100 - 80 = +20 \text{ kg}$   
New Total weight =  $1250 + 20 = 1270 \text{ kg}$   
Correct Average =  $1270 / 25 = 50.8 \text{ kg}$   
Hence, the correct answer is option A.

**34. Answer: B**

Principal (P) = ₹20,000, Rate (R) = 12% p.a., Time (T) = 9 years  
Simple Interest =  $(P * R * T) / 100$   
S.I. =  $(20000 * 12 * 9) / 100 = \text{Rs. } 21600$   
Hence, the correct answer is option B.

**35. Answer: D**

Distance = Speed \* Time =  $60 \text{ kmph} * (60/60) \text{ hour} = 60 \text{ km}$   
New Speed =  $60 + 15 = 75 \text{ kmph}$   
New Time = Distance / New Speed =  $60 / 75 \text{ hours}$   
New Time in minutes =  $(60 / 75) * 60 = 4 / 5 * 60 = 48 \text{ minutes}$   
Hence, the correct answer is option D.