CTJan27 Online

JMSS Exam Prep 2021 Mathematics

| Name: | | Class: | |
|-------|--|--------------------------|--------------------------------------|
| Do | Do all the sums. (Total: 34 Sums) | | |
| 1. | Find two numbers whose sum is 73 and whose d | lifference is 21. | |
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| | | Ans: | |
| 2. | Jane and Sue have 99 stickers altogether. Sue hadoes each have? | as 8 times the number of | stickers Jane has. How many stickers |
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| | | Ans: | |
| 3. | When one is added to both the numerator and the subtracted from both the numerator and the denoted | | |
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| | | Ans: | |

| 4. | In 2 years' time, a mother will be 5 times as old as her daughter. 2 years ago, she was 13 times as old as her daughter. Find their present ages. |
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| | Ans: |
| 5. | The square of a number is smaller than 13 times the number by 42. Find the number. |
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| 6. | Ans: |
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| | Ans: |
| 7. | A man buys 75 mangoes for \$15 and sells them at a profit of 30%. Find the selling price of each mango. |
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| | Ans: |
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| 8. | The cost price of an article is \$70 and it is sold for \$74.90. Find the gain per cent. | |
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| | Ans: | |
| 9. | A group of tourists spent \$3,200 at a shop. The tour guide who brought them there is paid a commission of \$32. Express his commission as a percentage of the sale price. | |
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| | Ans: | |
| 10. | An article is sold for \$680 and the salesperson is paid a commission of 15% of the sale price. Find how much commission the salesperson received. | |
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| | Ans: | |
| 11. | The list price of a LCD TV set is \$3,780. It is sold for \$3,213 after a discount. Find percentage discount. | |
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| | Ans: | |

| 12. | An article costs \$190. It's marked price is \$226. If a discount of 5% on the marked price is given for cash payment, express the profit as a percentage of the cost price. |
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| | Ans: |
| 13. | A sum of \$16,000 deposited in a bank for a period of 6 months yields an interest of \$560. Find the interest rate. |
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| | Ans: |
| 14. | Mr Lee borrowed \$830 from a bank which charged 15% per annum simple interest. How long was the loan if the interest was \$41.50? |
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| 15. | Ans: |
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| | Ans: |

| 16. | Each ml of a liquid weighs 1.2 g. Find the weight of 110 ml of the liquid. |
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| | Ans: |
| 17. | |
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| | Ans: |
| 18. | The ratio of two sums of money is 2: 3. The larger amount is \$360. Find the smaller amount. |
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| | Ans: |
| 19. | Find the ratio of the areas of two squares whose sides are 4 cm and 18 cm. |
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| | Ans: |
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| 20. | The scale of a map is 4 cm to 5 km. Express the scale in the form 1: n, where n is a number. |
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| | Ans: |
| 21. | Tea at \$49 per kg is mixed with tea at \$52 per kg in the ratio 1:3 by weight. Find the cost of 8 kg of the mixture. |
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| | Ans: |
| 22. | At an event there were 72 boys and 56 girls. Find the ratio of boys to girls at the event. |
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| | Ans: |
| 23. | A sum of \$1,440 is to be divided into two shares in the ratio 7:9. Find the smaller share. |
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| | Ans: |

The ratio of the number of boys to the number of girls in a school is 3:4. The total number of students is 2,240. 24. Find the number of boys and the number of girls. A man has enough money to buy 10 articles at \$7 each. Find the number of articles he can buy with the money if the price is \$14. A car consumes 12 litres of petrol for a distance of 114 km. Find how much petrol is needed for a journey of 26. 180.5 km. Given that 36 workers can complete a job in 29 days, calculate how long 58 workers will take to complete the 27. job.

If oranges are sold at \$5 for 10, find the number of oranges I can buy with \$4.50. 28. The area of triangle XYZ is 32 cm . Given that XY = YZ and angle $Y = 90^{\circ}$, find XY. Ans: In triangle PQR, PQ = 18 cm, QR = 20 cm, PQR is a right angle and PR = 26.9 cm. Find the area of the triangle. Find the height of a solid cylinder with a diameter of 14 cm and a total surface area of 352 cm. [Tak $\theta \pi = 22/7$]. 32. Find the total surface area of a closed cylinder with a height of 2 cm and a radius of 12 cm. [Take $\pi = 22/7$].

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33. A metal pipe 70 cm long has an external diameter of 10 cm. It is made of metal 2 mm thick. Find the volume of metal in the pipe. [Take $\pi = 3.14$].

Ans:

34. A metal pipe 80 cm long has an external diameter of 12 cm. It is made of metal 2 mm thick. Find the volume of metal in the pipe. [Take $\pi = 3.14$].

Ans