

**Year 6 Zonal 2024**

1. What is two thousand and twenty-eight in numerals?

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2. Find the next number in the sequence:

1, 3, 11, 43, \_\_\_\_\_

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3. The perimeter of a square is 9.8 cm.

Find the length of the side of the square in cm.

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4. How much change will you get from \$50 if you buy 7 bottles of juice at 95 c per bottle , 2 packets of biscuit at 60 c per packet and 4 kg of potatoes at \$1.95 per kg?

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5. A bicycle is advertised for sale at \$349.85 cash or 8 monthly repayments of \$65.55. By paying cash, how much , in dollars, you would save?

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6. A  $3\text{ cm} \times 3\text{ cm} \times 3\text{ cm}$  cube is painted and is then cut into small  $1\text{ cm} \times 1\text{ cm} \times 1\text{ cm}$  cube.

How many small cubes have 1 painted face?



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7. A fish tank in the shape of a rectangular prism is 1m long 25 cm wide. If it holds 55L of water when full, find its height in centimetres?

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8. Simplify  $1\frac{1}{6} \div 2\frac{3}{4}$

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9. How many pieces of ribbon  $\frac{2}{3}$  of a metre long can you cut from a 10 m roll?

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10. There are 300 students in a school. 60% of the students are girls. Find the number of boys in the school?

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11. Convert 36km/h to m/s

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12. The sum of 3 consecutive whole numbers is 126. Find the largest number.

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13. A class of 41 students has 9 more boys than girls. How many boys are there?

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14 Sam needs 12 pieces of fruit to make 3 glasses of juice. How many pieces of fruit does Sam need to make 10 glasses of juice?

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15. How many 750 millilitres orange juice bottles can be filled from a container with 27 litres of orange juice?

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16. A florist buys roses at \$0.60 apiece and sells them for \$1.80 a piece. If there are no other expenses, how many roses must be sold in order to make a profit of \$300?

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17. Ben can do a job working alone in 6 hours. Den can do the same job alone in 3 hours. If they both work together, in how many hours will the job be done?

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18. How many minutes elapse between 20:12 today to 21:02 tomorrow?

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19. A culture of 100 bacteria doubles in number every hour. How many hours will it take for the number of bacteria to reach 3200?

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20. Maria spent two-thirds of her money. Then she lost two-thirds of the money that was left. Four dollars remained. How much money did Maria have in the beginning?

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