

Magic Math Contest

1. _____ What is $277 + 223$?
2. _____ What is $323 - 101 - 221$?
3. _____ What is $21 \times 12 \div 3 \div 4$?
4. _____ James has a box that contains 20 cartons of pencils. Each carton contains 6 boxes of pencils. Each box contains 12 packs of pencils. Each pack of pencils contains 10 pencils. How many pencils does James have?
5. _____ Tim goes to Tomy's, the all new Mexican restaurant! He buys some tortilla chips for 2.00 dollars, a quesadilla for 5.00 dollars, and a churro for 1.50 dollars. He pays with a 10 dollar bill. How many cents change does he get?
6. _____ What is the remainder when 1001 is divided by 12?
7. _____ In a school of 100 people, 40 people play at least one sport and 35 people play an instrument. If 33 people don't play a sport or play an instrument, how many people play an instrument and play a sport?
8. _____ What is 20% of 40% of 50?
9. _____ What is the area of a circle with circumference of 12π ? (if the answer is something like 4π then just answer 4, don't put π in the answer).
10. _____ What is $(\frac{14}{12} + \frac{16}{12}) \times 6$
11. _____ If $5 \cdot x + 3 \cdot x = 2 \cdot x + 72$, what is x ? (If you didn't know, the dot is another symbol for multiply used to not get confused with the variable x and the multiplication sign).
12. _____ What is the area of a triangle that has height of 10 and a base that is triple of that?
13. _____ Sophie is taking part in his local 10 kilometer run. She runs the first 7 kilometers at 12 kilometers per hour. She now gets tired and slows down to 6 kilometers an hour for the next 2 kilometers. Finally, she walks the last kilometer at 4 kilometers per hour. How long in minutes did it take her to finish the whole 10 kilometer run

14. _____ What is the greatest common factor times the least common multiple of 25 and 40?
15. _____ Beth and Bob both draw a number of polygons on a piece of paper. Beth draws 10 hexagons and Bob draws 6 squares. Jeb then draws some number of heptagons on his piece of paper. They find out that Jeb drew the same number of sides as Beth and Bob did combined. How many heptagons did Jeb draw? (a heptagon is a polygon with 7 sides).
16. _____ What is the square root of $5^2 + 12^2$?
17. _____ Tina has a square made of clay with side length 10. She cuts out a smaller square with side length 6 from the inside of this square. The remaining clay in the original big square is used to make a smaller square. What is the side length of this square?
18. _____ The volume of a cylinder with base radius of 3 and height of 7 can be expressed as some number times π . What is that number?
19. _____ One day, a rabbit ate 1 carrot. On the second day it ate 2 carrots. On the third day it ate 4 carrots and so on. Everyday, he ate twice as many carrots as he ate the previous day. How many carrots had he eaten by the ninth day? (Include the carrots he ate on the ninth day).
20. _____ In a race there is 1000 dollars of cash that is going to be given to the winners. The top 5 winners receive the money in the ratio 1:3:5:7:9 from fifth place to first. How much money does the third place winner get in dollars?