

Calendar Math

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Here are math exercises for the month of September.

1. When you write the numerals from 1 to 100, how many times do you write the digit 3?
2. A mathematics contest has only three questions for which 2 points, 3 points and 4 points can be given, respectively. What scores are possible?
3. Susan has 6 blouses and 5 pair of slacks. How many different combinations of a blouse and a pair of slacks could she wear?
4. Mr. Johnson wants to enclose his dog in a square pen with a perimeter of 200 m. If the posts are 10 m apart, how many posts will he need?
5. Tom can mow a lawn in 4 hours. Bill can mow the same lawn in 3 hours. If they work together, how long will it take them to mow the lawn?
6. If the sides of a square were 2 cm longer, the area would contain 64 more square centimetres. What are the lengths of the sides of the original square?
7. Find 2 numbers whose sum is 11 and whose product is 24.
8. In a parking lot there are 10 vehicles which are either motorcycles or cars. Altogether there are 32 wheels. How many cars and how many motorcycles are in the parking lot?
9. If you cut a circle with 3 straight lines, what is the fewest number of pieces you will have? What is the largest number of pieces you will have?
10. If circles are worth 2 points, triangles are worth 3 points and squares are worth 5 points, draw a figure that has a total point value of 49 points. (There are several possible solutions.)
11. Using pennies, nickels and dimes, how many ways can you make change for a quarter?
12. A hen lays 4 eggs one week and 5 eggs the next week. If this pattern is repeated, how many eggs would the hen lay in one year?
13. If Bimba gives one half of his candies to Domenic and one third of his candies to Maria, what fraction of his candies are left for himself?
14. To go to school Daniel has to walk 3 blocks north, then 4 blocks west. If Daniel could walk directly to the school from his house, how many blocks would he have to walk?
15. Tim's birthday is April 19. Sarah's birthday is 23 days later. On what date is Sarah's birthday?
16. What are the fewest number of coins I can use to pay for a 99¢ hamburger?
17. What numbers come next in the following sequence? 1, 2, 3, __, __, __.
18. To fly from Saskatoon to Toronto takes 3 hours. If a plane leaves Saskatoon at 11:30 a.m., what time will it arrive in Toronto?
19. Jane says that she is 3 years younger than her brother and 2 years older than her sister. If the sum of their ages is 37 years, how old is each child?
20. Becky bought a hamburger for \$1.59 and a milkshake for \$2.37. How much change did she get from a \$5 bill?
21. A triangle has a perimeter of 27.9 cm. If the lengths of two of the sides are 7.8 cm and 12.3 cm, respectively, what is the length of the third side?
22. Complete this pattern. 2, 2, 4, 6, 10, 16, __, __, __, 110.
23. If vowels are worth 5 points and consonants are worth 10 points, how much is the word *Mississippi* worth?
24. A perfect score in 5-pin bowling is 450 points. Wesley scored 219 points. How many points fewer than a perfect score did he score?
25. Teresa was asked to write a specific digit number. When she wrote her number, she reversed the unit and tens digits. The number she wrote was 62 larger than the number she was asked to write. What number was she asked to write?
26. Miss Olsen bought candy bars for each of her 24 students. However, after handing out the candy bars she found that she still had one third the original number. How many students were absent?
27. Ben Franklin went to a party where 10 people were present. Everybody shook hands with

- everybody else. How many handshakes were there altogether?
28. Sue began a walking program. She walked 1 km on the first day, 2 km on the second day and 3 km on the third day. If she continued the same pattern for a week, what was the total distance she walked?
 29. Create a word problem that has an answer of 12. Doing this can result in a variety of interesting problems, especially with practice.
 30. A telephone company charges 15¢ for the first minute and 9¢ for each additional minute. If the charge for Anita's call was 96¢, how long did Anita talk?

Answers

1. 20
2. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
3. 30
4. 21
5. $1 \frac{5}{7}$ hours
6. 15 cm
7. 3 and 8
8. 6 cars, 4 motorcycles
9. (a) 4 (b) 7
10. Several possible solutions
11. 9
12. 234
13. $\frac{1}{6}$
14. 5 blocks
15. May 12
16. $9 (3 \times 25¢, 2 \times 10¢, 4 \times 1¢)$
17. 4, 5, 6
18. 4:30 p.m.
19. Jane's sister is 10 years old, Jane is 12 and her brother is 15.
20. \$1.04
21. 7.8 cm
22. 26, 42, 68
23. 90
24. 231
25. 19
26. 8
27. 45
28. 28 km
29. Answer will vary
30. 10 minutes