



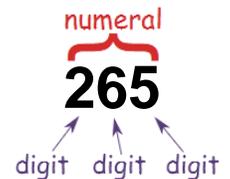
First Name: _____ Last Name: _____ Grade: _____
Teacher: _____ Parent's email: _____

Digits, Numerals, and Numbers

Welcome to Math Challenge #2. In this math challenge, you will be solving problems involving Digits, Numerals, and Numbers. A digit is a single symbol used to make numerals. 0, 1, 2, 3, 4, 6, 7, 8, 9 are the ten digits we use in everyday numeral. A numeral is a symbol or name that stands for a number. For example, 4, 59, and twelve are all numerals.

A number is a count or an idea. We write or talk about numbers using numerals.

Try to solve more problems than required. Good luck!



Kinder & First Grade: solve at least 3 problems.
Second & Third Grade: solve at least 6 problems.
Fourth Grade and above: solve at least 12 problems.

Problems

Answer

1. What is the largest 2 digit even number?

2. What is the greatest 4-digit odd number whose digits are all different?

3. Write three **different** three-digit numbers that use the digits 3, 5 and 5.

4.  Forty Panda bears have how many pairs of front paws?

5. Use the digits 1, 3, 7 to write a number whose ones digit is smaller than its tens digit, but bigger than its hundreds digit.

6. Write the four different 3-digit numbers that use the digits 0, 2, and 5 once each.

7. There are 3 ways to add two one-digit numbers to get a sum of 16:
 $9 + 7$, $8 + 8$, $7 + 9$. How many ways are there to have the sum of 7 rolling two fair cube dice?



8. Alex uses combination master lock to his treasure box. He uses digits: 5, 5, 7, and 3.
Use the clues to figure out the code that opens the master lock.

- 7 is not on an end
- The two ends are different digits.
- 3 is on the far right
- Two 5's are not next to each other.

9. What number is $\frac{1}{4}$ th of the way from 118 and $\frac{3}{4}$ th of the way from 162?

Use the table to solve the problems 10-12. Hawaii Fruit market sells fruit:



Fruit	Price (¢)
Rambutan	19
Dragon Fruit	9
Guava	49
Lilikoi	39
Soursop	99
Cherimoya	29



10. What is the only amount below that could be the total cost of 6 fruits?
233 cents 234 cents 235 cents 236 cents

11. Moana buys a bag of fruit for a total of 186 cents or \$1.86. No two fruits in the bag are the same. How many fruits are in her bag?

12. Maui buys a bag of fruit for 108 cents or \$1.08. All the fruit in his bag are the same. What fruit did Maui buy?

13. What is the **biggest sum** you can get solving the puzzle where each letter stands for some digit, different letters stand for different digits, same letters for the same digit.

$$\begin{array}{r} \text{PRIME} \\ + \text{EVEN} \\ \hline \end{array}$$

14. A shopkeeper of CandyLand has 30 chocolate bars, each of which weighs 2, 3, or 4 ounces. The total weight of the bars is 100 ounces. Which bars does the shopkeeper have more: 2-oz or 4-oz bars?

15. Two numbers with no zeros in their make-up (the way how you write them) can be multiplied to create 10,000. What are those numbers?

16. At the end of the day shop helper Jenny counted all the chocolate bars that remained on the shelves of Candy Store, but in hurry to go home, the number she wrote in the journal was missing its final digit. The following morning Jenny’s boss found out that the number of chocolate bars on the shelves was greater by 89 than the number found in Jenny’s journal. How many chocolate bars were on the shelves?

17. Two friends Larry and Garry played BINGO. After some time, Garry flushed with excitement and yelled out: “BINGO!” and said:

B	I	N	G	O
2	22	32	50	61
14	30	35	47	64
7	25	Free	52	72
5	19	37	59	70
11	27	45	48	75

- a) “My BINGO has all prime numbers”
- b) “The numbers in my BINGO add up to 138”
- c) “My BINGO is a vertical line”
- d) “My BINGO uses the FREE space”

One statement was false (lie); the rest were true. Where was Garry’s BINGO?

18. How many 2-digit whole numbers have no odd factor except 1?