



TIMO practice: Counting digits (with solutions)

12 problems · Grade 1, 2, 3 · answers and solutions at the end

Name _____

Date _____



Practise this type in the Karotto app, with questions read aloud and hints when stuck. Scan the code or visit playkarotto.com

Grade 1

- 1 If you write all the numbers from 1 to 21 in a row, how many digits do you write in all?

Answer: _____

- 2 If you write all the numbers from 1 to 14 in a row, how many digits do you write in all?

Answer: _____

- 3 If you write all the numbers from 1 to 18 in a row, how many digits do you write in all?

Answer: _____

- 4 If you write all the numbers from 1 to 28 in a row, how many digits do you write in all?

Answer: _____

Grade 2

- 5 Write the numbers from 1 to 84. How many times do you write the digit 7?

Answer: _____

- 6 Write the numbers from 1 to 53. How many times do you write the digit 6?

Answer: _____

- 7 If you write all the numbers from 1 to 79 in a row, how many digits do you write in all?

Answer: _____

- 8 Write the numbers from 1 to 95. How many times do you write the digit 7?

Answer: _____

Grade 3

- 9 Write the numbers from 1 to 110. How many times do you write the digit 5?

Answer: _____

- 10** Numbering the pages of a book, starting from page 1, uses 351 digits in all. How many pages does the book have?

Answer: _____

- 11** Write the numbers from 1 to 151. How many times do you write the digit 7?

Answer: _____

- 12** Numbering the pages of a book, starting from page 1, uses 145 digits in all. How many pages does the book have?

Answer: _____

Answers and solutions: Counting digits

1. Answer: 33 · Grade 1

How to think: A one-digit number takes 1 digit, and a two-digit number takes 2 digits.

Solution: From 1 to 9 you write 9 digits. From 10 to 21 there are 12 numbers, so you write 24 digits. In all: 9 plus 24 equals 33.

2. Answer: 19 · Grade 1

How to think: A one-digit number takes 1 digit, and a two-digit number takes 2 digits.

Solution: From 1 to 9 you write 9 digits. From 10 to 14 there are 5 numbers, so you write 10 digits. In all: 9 plus 10 equals 19.

3. Answer: 27 · Grade 1

How to think: A one-digit number takes 1 digit, and a two-digit number takes 2 digits.

Solution: From 1 to 9 you write 9 digits. From 10 to 18 there are 9 numbers, so you write 18 digits. In all: 9 plus 18 equals 27.

4. Answer: 47 · Grade 1

How to think: A one-digit number takes 1 digit, and a two-digit number takes 2 digits.

Solution: From 1 to 9 you write 9 digits. From 10 to 28 there are 19 numbers, so you write 38 digits. In all: 9 plus 38 equals 47.

5. Answer: 18 · Grade 2

How to think: Count the ones place first, then the tens place.

Solution: Ones place: 8 times, tens place: 10 times. 8 plus 10 equals 18 times.

6. Answer: 5 · Grade 2

How to think: Count the ones place first, then the tens place.

Solution: Ones place: 5 times, tens place: 0 times. 5 plus 0 equals 5 times.

7. Answer: 149 · Grade 2

How to think: A one-digit number takes 1 digit, and a two-digit number takes 2 digits.

Solution: From 1 to 9 you write 9 digits. From 10 to 79 there are 70 numbers, so you write 140 digits. In all: 9 plus 140 equals 149.

8. Answer: 19 · Grade 2

How to think: Count the ones place first, then the tens place.

Solution: Ones place: 9 times, tens place: 10 times. 9 plus 10 equals 19 times.

9. Answer: 21 · Grade 3

How to think: Count the ones place first, then the tens place.

Solution: Ones place: 11 times, tens place: 10 times. 11 plus 10 equals 21 times.

10. Answer: 153 · Grade 3

How to think: Pages 1 to 9 use 9 digits, and pages 10 to 99 use 180 digits.

Solution: Take away the 189 digits of pages 1 to 99: 162 digits are left, enough for 54 three-digit pages. The book has 99 plus 54 equals 153 pages.

11. Answer: 25 · Grade 3

How to think: Count the ones place first, then the tens place.

Solution: Ones place: 15 times, tens place: 10 times. 15 plus 10 equals 25 times.

12. Answer: 77 · Grade 3

How to think: Pages 1 to 9 use 9 digits, and pages 10 to 99 use 180 digits.

Solution: Take away the 9 digits of pages 1 to 9: 136 digits are left, enough for 68 two-digit pages. The book has 9 plus 68 equals 77 pages.
