

# Length on a Number Line

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_ / 24

## Q Quick Review

A **number line** is like a ruler stretched out. The numbers are spaced evenly, and the space between each pair of numbers is one **unit**. To show a length, start at one number and count the jumps to another number. To **add** on a number line, jump **forward**. To **subtract**, jump **backward**. The distance between two points is how far apart they are — you can find it by subtracting the smaller number from the bigger one.

◇ **Example:** On a number line, you start at 3 and jump forward 5 units. Where do you land?

⇒ On a number line, jumping forward means adding. We begin at the number 3. Then we make 5 jumps forward, counting 4, 5, 6, 7, 8. We can also just add:  $3 + 5 = 8$ . So we land on the number 8.

**Answer:** 8

## PRACTICE

Use the number line idea to answer each question.

1. Start at 4 and jump forward 6 units. Where do you land? \_\_\_\_\_
2. Start at 9 and jump backward 3 units. Where do you land? \_\_\_\_\_
3. How far apart are 5 and 12 on a number line? \_\_\_\_\_
4. Start at 0 and jump forward 8 units. Where do you land? \_\_\_\_\_
5. How far apart are 3 and 10 on a number line? \_\_\_\_\_
6. Start at 15 and jump backward 7 units. Where do you land? \_\_\_\_\_
7. Start at 6 and jump forward 9 units. Where do you land? \_\_\_\_\_
8. How far apart are 8 and 20 on a number line? \_\_\_\_\_
9. Start at 11 and jump backward 5 units. Where do you land? \_\_\_\_\_
10. Start at 2 and jump forward 13 units. Where do you land? \_\_\_\_\_
11. How far apart are 0 and 9 on a number line? \_\_\_\_\_
12. Start at 18 and jump backward 10 units. Where do you land? \_\_\_\_\_
13. Start at 7 and jump forward 7 units. Where do you land? \_\_\_\_\_
14. How far apart are 6 and 14 on a number line? \_\_\_\_\_
15. Start at 20 and jump backward 12 units. Where do you land? \_\_\_\_\_
16. Start at 5 and jump forward 10 units. Where do you land? \_\_\_\_\_
17. How far apart are 4 and 17 on a number line? \_\_\_\_\_
18. Start at 13 and jump backward 8 units. Where do you land? \_\_\_\_\_
19. A bug hops from 1 to 9 on a number line. How many units did it hop? \_\_\_\_\_
20. A frog jumps from 16 back to 10 on a number line. How many units back? \_\_\_\_\_

## ◆ Word Problems

21. A grasshopper sits at 4 on a number line. It jumps forward 7 units to reach a leaf. What number is the leaf on? \_\_\_\_\_
22. On a number line, a snail is at 15. It slides backward 6 units. What number is the snail on now? \_\_\_\_\_
23. Two ants are on a number line. One is at 3 and the other is at 13. How many units apart are the two ants? \_\_\_\_\_
24. A toy car starts at 2 on a number line. It rolls forward 9 units, then rolls back 4 units. What number is it on now? \_\_\_\_\_



## Answer Keys

- |  |   |
|--|---|
| 1. <input type="text" value="10"/>       | 13. <input type="text" value="14"/>       |
| 2. <input type="text" value="6"/>        | 14. <input type="text" value="8 units"/>  |
| 3. <input type="text" value="7 units"/>  | 15. <input type="text" value="8"/>        |
| 4. <input type="text" value="8"/>        | 16. <input type="text" value="15"/>       |
| 5. <input type="text" value="7 units"/>  | 17. <input type="text" value="13 units"/> |
| 6. <input type="text" value="8"/>        | 18. <input type="text" value="5"/>        |
| 7. <input type="text" value="15"/>       | 19. <input type="text" value="8 units"/>  |
| 8. <input type="text" value="12 units"/> | 20. <input type="text" value="6 units"/>  |
| 9. <input type="text" value="6"/>        | 21. <input type="text" value="11"/>       |
| 10. <input type="text" value="15"/>      | 22. <input type="text" value="9"/>        |
| 11. <input type="text" value="9 units"/> | 23. <input type="text" value="10 units"/> |
| 12. <input type="text" value="8"/>       | 24. <input type="text" value="7"/>        |

### Step-by-Step Explanations

- |   |  |
|---|--|
| <p>1. Jumping forward means add: <math>4 + 6 = 10</math>.</p> <p>2. Jumping backward means subtract: <math>9 - 3 = 6</math>.</p> <p>3. Subtract the smaller from the bigger: <math>12 - 5 = 7</math> units.</p> <p>4. Jumping forward means add: <math>0 + 8 = 8</math>.</p> <p>5. Subtract: <math>10 - 3 = 7</math> units apart.</p> <p>6. Jumping backward means subtract: <math>15 - 7 = 8</math>.</p> <p>7. Jumping forward means add: <math>6 + 9 = 15</math>.</p> <p>8. Subtract: <math>20 - 8 = 12</math> units apart.</p> <p>9. Jumping backward means subtract: <math>11 - 5 = 6</math>.</p> <p>10. Jumping forward means add: <math>2 + 13 = 15</math>.</p> <p>11. Subtract: <math>9 - 0 = 9</math> units apart.</p> <p>12. Jumping backward means subtract: <math>18 - 10 = 8</math>.</p> <p>13. Jumping forward means add: <math>7 + 7 = 14</math>.</p> | <p>14. Subtract: <math>14 - 6 = 8</math> units apart.</p> <p>15. Jumping backward means subtract: <math>20 - 12 = 8</math>.</p> <p>16. Jumping forward means add: <math>5 + 10 = 15</math>.</p> <p>17. Subtract: <math>17 - 4 = 13</math> units apart.</p> <p>18. Jumping backward means subtract: <math>13 - 8 = 5</math>.</p> <p>19. Subtract: <math>9 - 1 = 8</math> units hopped.</p> <p>20. Subtract: <math>16 - 10 = 6</math> units backward.</p> <p>21. Jumping forward on a number line means adding: <math>4 + 7 = 11</math>. The leaf is on 11.</p> <p>22. Sliding backward means subtracting: <math>15 - 6 = 9</math>. The snail is now on 9.</p> <p>23. To find the distance, subtract the smaller from the bigger: <math>13 - 3 = 10</math> units apart.</p> <p>24. First add the forward roll: <math>2 + 9 = 11</math>. Then subtract the roll back: <math>11 - 4 = 7</math>. The car is on 7.</p> |
|---|--|



# Are You Ready for Grade 3 Math?

Get a Head Start with the District of Columbia DC CAPE Grade 3 Math Bundle

## District of Columbia DC CAPE Grade 3 Math Bundle

Full practice tests, complete answer keys, and step-by-step explanations

Everything a second grader needs to walk into Grade 3 with confidence!

Grade 3 Math Bundle

Scan to open the bundle:



Tests  
+ Answer Keys  
One Bundle

**Important:** This bundle combines full practice and clear explanations in one easy-to-print package — built to help a second grader step into Grade 3 math with confidence. **Made for parents, teachers, and tutors who want everything in one place.**

### Full Practice Tests

- ✓ Complete DC CAPE-style Grade 3 practice tests
- ✓ Mirrors the real exam format and difficulty
- ✓ Builds test-taking confidence early
- ✓ Aligned with state Grade 3 math standards

**Start with a full-length practice test!**

### Step-by-Step Answer Keys

- ✓ Every question worked out, not just an answer
- ✓ Friendly, kid-ready explanations
- ✓ Catches and explains common mistakes
- ✓ Parents can help even without a math background

**Learn from every mistake!**

### Skill-Building Worksheets

- ✓ Targets one Grade 3 math skill per page
- ✓ Place value, multiplication, fractions, geometry
- ✓ Quick Review plus practice and word problems
- ✓ Built-in answer key for easy self-checking

**Master one skill at a time!**