

Length Detective

Add and subtract to solve length problems.

GRADE 2 • 2.MD.B.5

CCSS.Math.Content.2.MD.B.5 "Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the..."

NAME _____

DATE _____

FIND THE LENGTH

When lengths use the same unit, add to find a total length. Subtract to find a length left or the difference between two lengths. You can draw quick lines or write an equation with a blank.

WORKED EXAMPLE

A kite string is 11 inches long.
Ava adds 6 inches of string.
How long is the string now?

1. Start with 11 inches.
2. Add 6 inches: $11 + 6 = \underline{\quad}$.
3. $11 + 6 = 17$.

Answer: 17 inches

PRACTICE 5 problems

- 1** A red toy car rolls 9 cm. A blue toy car rolls 4 cm farther. How far does the blue toy car roll?

ANSWER _____

- 2** Leo has a 15-inch strip of paper. He cuts off 7 inches. How long is the strip now?

ANSWER _____

- 3** An 18-cm crayon is next to a 10-cm crayon. How much longer is the 18-cm crayon?

ANSWER _____

- 4** Zara joins a 20-cm track and a 7-cm track. How long is the track altogether?

ANSWER _____

- 5** A 30-inch jump rope is cut shorter by 8 inches. How long is the jump rope now?

ANSWER _____

APPLY IT Show your work

- 1** Sam builds a road for toy cars. One piece is 24 cm long. The next piece is 13 cm long. How long is the road altogether?

WORK SPACE

ANSWER _____

- 2** A skate ramp is 45 cm long. A smaller ramp is 16 cm shorter. How long is the smaller ramp?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A robot path is 54 cm long. The robot travels 28 cm, then stops. How many centimeters are left? Write an equation and one sentence to explain.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A red toy car rolls 9 cm. A blue toy car rolls 4 cm farther. How far does the blue toy car roll?	13 cm
2	Leo has a 15-inch strip of paper. He cuts off 7 inches. How long is the strip now?	8 inches
3	An 18-cm crayon is next to a 10-cm crayon. How much longer is the 18-cm crayon?	8 cm
4	Zara joins a 20-cm track and a 7-cm track. How long is the track altogether?	27 cm
5	A 30-inch jump rope is cut shorter by 8 inches. How long is the jump rope now?	22 inches

PART 2 • APPLY IT

1. **37 cm** Add the two lengths: $24 + 13 = 37$. The road is 37 cm long.
2. **29 cm** Subtract the shorter amount: $45 - 16 = 29$. The smaller ramp is 29 cm long.

CHALLENGE

54 - 28 = 26. There are 26 cm left.

Accept correct addition or subtraction equations with a blank or an answer. Accept length labels written as cm, centimeters, in, or inches when the unit matches the problem.