LESSON MAKER PRO

Length Lab

Add, subtract, and convert lengths.

GRADE 4 · MA.4.M.1

MA.4.M.1 "Measure the length of objects and solve problems involving measurement."

NAME _____ DATE _____

PLAN YOUR UNITS

When you add or subtract lengths, keep the same units together. Trade 100 centimeters for 1 meter, or trade 12 inches for 1 foot, when needed. Write a unit with every answer.

WORKED EXAMPLE

A trail has one section that is 4 m 18 cm long and another section that is 2 m 16 cm long. What is the total length?

1. Add the meters: 4 m + 2 m = 6 m.
2. Add the centimeters: 18 cm + 16 cm = 34 cm.
3. Combine the units: 6 m 34 cm.

Answer: 6 m 34 cm

PRACTICE 6 problems

1 A ribbon is 63 cm long. You cut off 21 cm. How many centimeters of ribbon are left?

ANSWER _____

2 A string is 5 ft 27 in. How many inches long is the string?

ANSWER _____

3 A 96-inch rope is cut into 3 equal pieces. How long is each piece?

ANSWER _____

4 A plant is 1 m 55 cm tall. Write its height in centimeters.

ANSWER _____

5 A 72-inch banner is hung beside a 48-inch banner. How much longer is the first banner?

ANSWER _____

6 A bookshelf is 11 ft long. How many inches long is the bookshelf?

ANSWER _____

APPLY IT Show your work

1 At the park, Jada walks 250 m to the soccer field and then 175 m to the playground. How far does she walk altogether?

WORK SPACE

ANSWER _____

2 Milo has an 86 cm strip of paper. He cuts 19 cm from each end. How long is the strip after both cuts?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A robotics team joins a 9 m 85 cm cable to a 7 m 95 cm cable. How long is the joined cable? Show how you regroup the centimeters.

WORK SPACE AND ANSWER

ANSWER KEY

Length Lab

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A ribbon is 63 cm long. You cut off 21 cm. How many centimeters of ribbon are left?	**42 cm**
2	A string is 5 ft 27 in. How many inches long is the string?	**87 in**
3	A 96-inch rope is cut into 3 equal pieces. How long is each piece?	**32 in**
4	A plant is 1 m 55 cm tall. Write its height in centimeters.	**155 cm**
5	A 72-inch banner is hung beside a 48-inch banner. How much longer is the first banner?	**24 in**
6	A bookshelf is 11 ft long. How many inches long is the bookshelf?	**132 in**

PART 2 · APPLY IT

1. **425 m** 250 m + 175 m = 425 m. Jada walks 425 m altogether.
2. **48 cm** 86 cm - 19 cm - 19 cm = 48 cm. The strip is 48 cm long.

CHALLENGE

85 cm + 95 cm = 180 cm = 1 m 80 cm; 9 m + 7 m + 1 m = 17 m, so the cable is 17 m 80 cm.

Accept equivalent unit wording, such as “87 inches” for 87 in. For the challenge, students should show that 180 cm is regrouped as 1 m 80 cm.