LESSON MAKER PRO

Measure the Move

Read a scale, convert units, and solve.

GRADE 4 · 4.M.A.22

4.M.A.22 "Use the four operations to solve measurement word problems with distance, intervals of time, liquid volume, mass of objects, and money. a. Solve measurement problems involving simple fractions or decimals. b..."

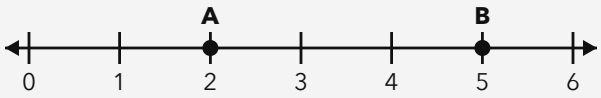
NAME _____ DATE _____

FROM MARKS TO MEASUREMENTS

On a number line, subtract the starting mark from the ending mark to find the distance between them. Then convert to the unit the question asks for and use the operation the story needs.

WORKED EXAMPLE

The number line shows positions in meters. How many centimeters are there from A to B?

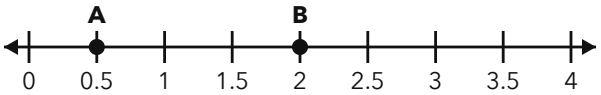


1. Subtract the positions: 5 - 2 = 3 meters.
2. Use 1 meter = 100 centimeters.
3. Convert: 3 × 100 = 300 centimeters.

Answer: 300 centimeters

PRACTICE 6 problems

1 The number line shows positions in meters along a path. How many centimeters are there from A to B?



ANSWER _____

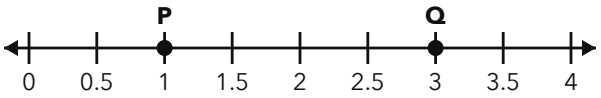
2 A scooter route is 7 kilometers long. How many meters long is it?

ANSWER _____

3 A jug has 1 liter 750 milliliters of juice. You pour in 500 more milliliters. How many milliliters are in the jug now?

ANSWER _____

4 The number line shows time in hours. How many minutes pass from P to Q?



ANSWER _____

5 A bag holds 2 kilograms 300 grams of rice. You add 450 grams. How many grams of rice are in the bag?

ANSWER _____

6 You have $8.50. A comic costs $3.75. How much money is left?

ANSWER _____

APPLY IT Show your work

1 Mira bikes 1 kilometer 250 meters to the park, then 750 meters to the skate area. How many meters does she bike in all?

WORK SPACE

ANSWER _____

2 Jay has 2 liters of lemonade. He fills 3 bottles with 450 milliliters each. How many milliliters of lemonade are left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

The number line shows positions in kilometers. A cyclist rides from A to B, then returns to A. How many meters does the cyclist ride in all? Show your steps.



WORK SPACE AND ANSWER

ANSWER KEY

Measure the Move

GRADE 4 · 4.M.A.22

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	The number line shows positions in meters along a path. How many centimeters are there from A to B?	**150 centimeters**
2	A scooter route is 7 kilometers long. How many meters long is it?	**7,000 meters**
3	A jug has 1 liter 750 milliliters of juice. You pour in 500 more milliliters. How many milliliters are in the jug now?	**2,250 milliliters**
4	The number line shows time in hours. How many minutes pass from P to Q?	**120 minutes**
5	A bag holds 2 kilograms 300 grams of rice. You add 450 grams. How many grams of rice are in the bag?	**2,750 grams**
6	You have $8.50. A comic costs $3.75. How much money is left?	**$4.75**

PART 2 · APPLY IT

1. **2,000 meters** Convert 1 kilometer 250 meters to 1,250 meters. Add 1,250 + 750 = 2,000 meters.
2. **650 milliliters** Convert 2 liters to 2,000 milliliters. The bottles hold 3 × 450 = 1,350 milliliters, so 2,000 - 1,350 = 650 milliliters remain.

CHALLENGE

2.75 - 0.25 = 2.5 kilometers one way; 2.5 × 2 = 5 kilometers; 5 × 1,000 = 5,000 meters.

Accept equivalent forms with the correct units. For the challenge, students may convert each one-way distance to meters before doubling.