LESSON MAKER PRO

Decimal Model Moves

Use place-value charts and tape diagrams to work with hundredths.

GRADE 5 · 5.NBT.B.8.a

5.NBT.B.8.a "Use concrete models and drawings to solve problems with decimals to hundredths."

NAME _____ DATE _____

TRADE BETWEEN PLACES

A place-value chart helps you line up ones, tenths, and hundredths. When you add, trade 10 hundredths for 1 tenth, or 10 tenths for 1 one.

WORKED EXAMPLE

What is the sum shown in the place-value chart?

PLACE-VALUE CHART

Amount	Ones	Tenths	Hundredths
First	1	2	6
Second	0	3	8

1. Add the hundredths: 6 + 8 = 14. Write 4 hundredths and trade 10 hundredths for 1 tenth.
2. Add the tenths: 2 + 3 + 1 = 6 tenths.
3. Add the ones: 1 + 0 = 1 one.

Answer: 1.64

PRACTICE 6 problems

1 Find the sum shown in the chart.

PLACE-VALUE CHART

Amount	Ones	Tenths	Hundredths
First	0	4	7
Second	0	3	6

ANSWER _____

2 Find the sum shown in the chart.

PLACE-VALUE CHART

Amount	Ones	Tenths	Hundredths
First	2	5	8
Second	1	2	7

ANSWER _____

3 Find the total shown by the tape diagram.

1.35	0.42	?

ANSWER _____

4 Find the total shown by the tape diagram.

0.68	0.57	?

ANSWER _____

5 Put 3.46 and 2.39 into the chart. What is their sum?

PLACE-VALUE CHART

Amount	Ones	Tenths	Hundredths
First			
Second			

ANSWER _____

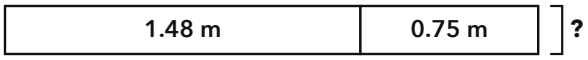
6 Find the total of all three parts.

0.24	1.07	0.58	?

ANSWER _____

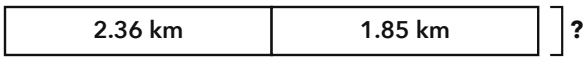
APPLY IT Show your work

1 Ava makes a paper chain in two sections. The tape diagram shows their lengths. How long is the whole chain?



ANSWER _____

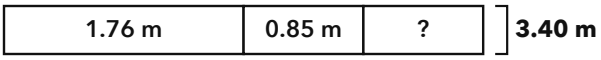
2 A game character travels two parts of a course. The tape diagram shows the distance for each part. How far does the character travel in all?



ANSWER _____

CHALLENGE One step up

A paper chain has three sections. Find the missing length in the tape diagram. Explain how you know.



WORK SPACE AND ANSWER

ANSWER KEY

Decimal Model Moves

GRADE 5 · 5.NBT.B.8.a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find the sum shown in the chart.	**0.83**
2	Find the sum shown in the chart.	**3.85**
3	Find the total shown by the tape diagram.	**1.77**
4	Find the total shown by the tape diagram.	**1.25**
5	Put 3.46 and 2.39 into the chart. What is their sum?	**5.85**
6	Find the total of all three parts.	**1.89**

PART 2 · APPLY IT

1. **2.23 m** Add the two sections: 1.48 + 0.75 = 2.23.
2. **4.21 km** Add the distances: 2.36 + 1.85 = 4.21.

CHALLENGE

The missing section is 0.79 m. The two known sections total 2.61 m, and 3.40 m - 2.61 m = 0.79 m.

Accept equivalent decimal forms, such as 0.830 for 0.83. In the challenge, accept an explanation that shows 2.61 m + 0.79 m = 3.40 m.