LESSON MAKER PRO

Decimal Designs

Use tape diagrams to work with decimals.

GRADE 5 · MT.5.NBT.7

MT.5.NBT.7 "Add, subtract, multiply, and divide decimals to hundredths using concrete models or drawings. This standard should incorporate designs and cultural context relating to Montana Indigenous Peoples and local communities."

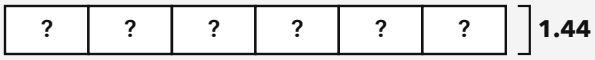
NAME _____ DATE _____

THINK IN HUNDREDTHS

A tape diagram can show decimal amounts joined together or split into equal parts. Think of each amount in hundredths as you calculate, then write the result as a decimal.

WORKED EXAMPLE

The tape shows 1.44 split into 6 equal parts. How much is one part?

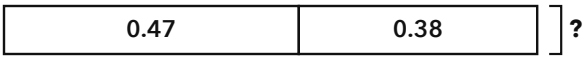


1. 1.44 is 144 hundredths.
2. 144 hundredths ÷ 6 = 24 hundredths.
3. 24 hundredths = 0.24.

Answer: 0.24

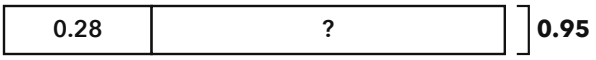
PRACTICE 6 problems

1 Use the tape diagram to find the total.



ANSWER _____

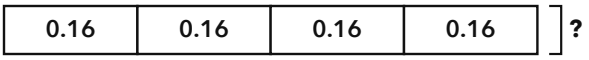
2 Find the missing part. Write a subtraction equation.



ANSWER _____

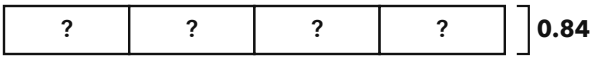
_____

3 The tape shows 4 equal pieces. Find their total length.



ANSWER _____

4 The tape shows 0.84 split into 4 equal parts. How much is one part?



ANSWER _____

5 Find the sum: 1.25 + 0.68

ANSWER _____

6 Find the difference: 1.50 - 0.76

ANSWER _____

APPLY IT Show your work

1 At an art fair featuring Montana Indigenous artists, a student buys a sticker for $2.35 and a bookmark for $1.45. How much does the student spend?

WORK SPACE

ANSWER _____

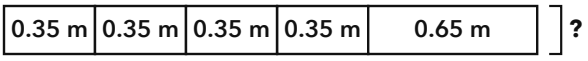
2 At a local community gathering, students have 2.40 m of ribbon for 4 display tables. They share the ribbon equally. How many meters go on each table?

WORK SPACE

ANSWER _____

CHALLENGE One step up

At a local art fair, 4 rolls each hold 0.35 m of display border. One more roll holds 0.65 m. How many meters of border are there in all? Use the tape diagram to explain your steps.



WORK SPACE AND ANSWER

ANSWER KEY

Decimal Designs

GRADE 5 · MT.5.NBT.7

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use the tape diagram to find the total.	**0.85**
2	Find the missing part. Write a subtraction equation.	**0.95 - 0.28 = 0.67**
3	The tape shows 4 equal pieces. Find their total length.	**0.64**
4	The tape shows 0.84 split into 4 equal parts. How much is one part?	**0.21**
5	Find the sum: 1.25 + 0.68	**1.93**
6	Find the difference: 1.50 - 0.76	**0.74**

PART 2 · APPLY IT

1. **$3.80** Add the two prices: $2.35 + $1.45 = $3.80.
2. **0.60 m** Divide 2.40 m into 4 equal parts: 2.40 ÷ 4 = 0.60 m.

CHALLENGE

4 × 0.35 = 1.40; 1.40 + 0.65 = 2.05 m.

Accept equivalent decimal forms, such as 0.6 m for 0.60 m. For the challenge, accept repeated addition in place of multiplication if both steps and the correct total are shown.