LESSON MAKER PRO

Numbers at Work

Model real situations with fractions and decimals.

GRADE 6 · 6.N.4.4

6.N.4.4 "Use mathematical modeling to solve and interpret problems including money, measurement, geometry, and data requiring arithmetic with decimals, fractions, and mixed numbers."

NAME _____ DATE _____

CHOOSE THE OPERATION

Decide what the numbers represent before you calculate. Multiply to find a part of a quantity or a total made of equal groups. Divide to find how many equal groups fit, then include the correct unit in your answer.

WORKED EXAMPLE

A 2.8-meter ribbon is cut into pieces that are each 0.7 meter long. How many pieces can be cut?

1. Divide the total length by the length of one piece: 2.8 ÷ 0.7.
2. Multiply both numbers by 10: 28 ÷ 7.
3. 28 ÷ 7 = 4.

Answer: 4 pieces

PRACTICE 6 problems

1 Three identical notebooks cost $6.75 in all. What is the cost of one notebook?

ANSWER _____

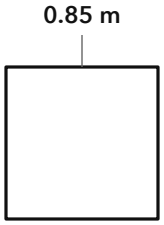
2 A trail is 5/6 mile long. You walk 2/3 of the trail. How far do you walk?

ANSWER _____

3 A smoothie recipe uses 1 1/2 cups of juice per batch. How much juice is needed for 2 1/2 batches?

ANSWER _____

4 Find the perimeter of the square.



ANSWER _____

5 Each bag holds 3/8 pound of trail mix. How many full bags can you fill with 2 1/4 pounds?

ANSWER _____

6 You practice a dance for 0.75 hour each day for 6 days. How many hours do you practice in all?

ANSWER _____

APPLY IT Show your work

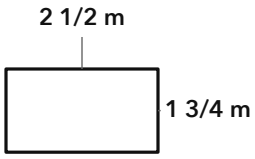
1 The table shows the lengths of three videos you recorded. Each hour of video uses 0.6 GB of storage. How much storage do all three videos use?

RECORDED VIDEOS

Video	Length (hours)
A	0.75
B	1.25
C	0.5

ANSWER _____

2 A school garden has the dimensions shown. Mulch costs $3.20 per square meter. How much does it cost to cover the whole garden?



ANSWER _____

CHALLENGE One step up

A game club has $30. It buys 3 card packs for $2.75 each, then spends 2/3 of the remaining money on snacks. How much money does the club have left? Show how you know.

WORK SPACE AND ANSWER

ANSWER KEY

Numbers at Work

GRADE 6 · 6.N.4.4

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Three identical notebooks cost $6.75 in all. What is the cost of one notebook?	**$2.25**
2	A trail is 5/6 mile long. You walk 2/3 of the trail. How far do you walk?	**5/9 mile**
3	A smoothie recipe uses 1 1/2 cups of juice per batch. How much juice is needed for 2 1/2 batches?	**3 3/4 cups**
4	Find the perimeter of the square.	**3.4 m**
5	Each bag holds 3/8 pound of trail mix. How many full bags can you fill with 2 1/4 pounds?	**6 bags**
6	You practice a dance for 0.75 hour each day for 6 days. How many hours do you practice in all?	**4.5 hours**

PART 2 · APPLY IT

1. **1.5 GB** The videos total 0.75 + 1.25 + 0.5 = 2.5 hours. Multiply 2.5 by 0.6 GB per hour to get 1.5 GB.
2. **$14.00** The garden's area is 2 1/2 × 1 3/4 = 4 3/8 square meters. Multiply 4 3/8 by $3.20 per square meter to get $14.00.

CHALLENGE

$7.25. The card packs cost $8.25, leaving $21.75. The club keeps 1/3 of that amount, and $21.75 ÷ 3 = $7.25.

Accept equivalent forms, such as 15/4 cups for problem 3 and $14 for the garden cost. In the challenge, accept any correct calculation showing that the club keeps 1/3 of its money after buying the card packs.