LESSON MAKER PRO

Measure It Exactly

Use clear numbers, operations, labels, and checks.

GRADE 7 · 7.MP.6

7.MP.6 "Attend to precision."

NAME _____ DATE _____

PRECISION MATTERS

Precise math uses the correct operation, numbers, and units. Write an equation before solving, then check whether your answer fits the situation. State what your number means, such as dollars, minutes, or liters.

WORKED EXAMPLE

A charity has $3.60 to split equally among 8 prize envelopes. How much money goes in each envelope?

1. Identify the total, $3.60, and the 8 equal envelopes.
2. Divide: $3.60 / 8 = $0.45.
3. Check: 8 x $0.45 = $3.60.

Answer: $0.45 in each envelope.

PRACTICE 6 problems

1 A runner completes 5 laps on a 2.4 km trail. Write an equation, then find the total distance with the correct unit.

ANSWER _____

2 A gardener shares 5/6 liter of plant food equally among 4 seedlings. How many liters does each seedling get? Write the fraction in simplest form.

ANSWER _____

3 Kai has $15.75 at a school event and spends $4.60 on a snack. Find the amount of money left. Include the dollar sign and cents.

ANSWER _____

4 A game tournament starts at 6:35 p.m. and ends at 7:50 p.m. Find the elapsed time. Use hours and minutes.

ANSWER _____

5 A student watches 2/3 of a 21-minute science video. How many minutes does the student watch? Show the unit.

ANSWER _____

6 A hiking group divides 0.54 kg of trail mix equally among 6 hikers. How many kilograms of trail mix does each hiker receive?

ANSWER _____

APPLY IT Show your work

1 The art club orders 36 stickers that cost $0.75 each. Shipping costs $4.50, and the club has a $32.00 budget. How much money will remain after the order? Write an equation and include dollars and cents.

WORK SPACE

ANSWER _____

2 A student has 2 1/4 cups of yogurt for smoothies. Each smoothie needs 3/8 cup of yogurt. How many complete smoothies can the student make, and how much yogurt will be left? Give both answers with units.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A student measures a bike route as 5.4 km. The student rides 3/5 of the route, turns around, and rides the same distance back. The student claims the total distance is 6 km because 3/5 of 5.4 is 3. What is the precise total distance? Explain the error using an equation and units.

WORK SPACE AND ANSWER

Measure It Exactly

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A runner completes 5 laps on a 2.4 km trail. Write an equation, then find the total distance with the correct unit.	**12 km**
2	A gardener shares 5/6 liter of plant food equally among 4 seedlings. How many liters does each seedling get? Write the fraction in simplest form.	**5/24 liter per seedling**
3	Kai has $15.75 at a school event and spends $4.60 on a snack. Find the amount of money left. Include the dollar sign and cents.	**$11.15**
4	A game tournament starts at 6:35 p.m. and ends at 7:50 p.m. Find the elapsed time. Use hours and minutes.	**1 hour 15 minutes**
5	A student watches 2/3 of a 21-minute science video. How many minutes does the student watch? Show the unit.	**14 minutes**
6	A hiking group divides 0.54 kg of trail mix equally among 6 hikers. How many kilograms of trail mix does each hiker receive?	**0.09 kg per hiker**

PART 2 · APPLY IT

1. **$0.50 remains** Multiply 36 x $0.75 = $27.00, then add $4.50 for a total cost of $31.50. Subtract $31.50 from $32.00.
2. **6 complete smoothies, 0 cups of yogurt left** Divide 2 1/4 by 3/8, or multiply 9/4 x 8/3, to get 6. Check that 6 x 3/8 cup equals 2 1/4 cups.

CHALLENGE

6.48 km. The distance one way is 3/5 x 5.4 km = 3.24 km, not 3 km, and 2 x 3.24 km = 6.48 km.

Accept equivalent forms, such as 75 minutes for 1 hour 15 minutes and 90 g for 0.09 kg. Require correct units and calculations that match each situation.