

Additional Practice 12-8

Solve Word Problems Using Measurement Conversions

Another Look!

Kyle hiked 10 miles on Saturday. He hiked half as many miles on Sunday. How many total yards did Kyle hike?

What question needs to be answered first?

How many miles did Kyle hike on Sunday?

Answer this question.

$$10 \div 2 = 5 \text{ miles}$$

What is the total number of miles hiked?

$$10 + 5 = 15 \text{ miles}$$

Convert the answer to yards.

$$1 \text{ mi} = 1,760 \text{ yd, so } 15 \text{ miles is } 15 \times 1,760 = 26,400 \text{ yd}$$

Kyle hiked a total of 26,400 yards.

Read the problem.
Underline what you know. Circle what you are asked to find.



1. Kendra biked 10 kilometers on Monday. She biked twice as many kilometers on Tuesday. How many total meters did she bike?

Underline what you know. Circle what you need to find. **See underlined and circled text.**

What question do you need to answer first?

How many kilometers did Kendra bike on Tuesday?

How many meters did Kendra bike in all? **30,000 m**

2. Wilson made fruit punch. He used 2 quarts of orange juice and 1 pint of cranberry juice. He used one quart more ginger ale than orange juice. How many cups of fruit punch did Wilson make?

22 cups

3. Claire's backyard is in the shape of a rectangle and has a length of 19.5 feet. It cost her \$945 to fence in the yard. If fencing costs \$15 per foot, what is the width of Claire's backyard?

12 feet

4. Zayna is putting ribbon around a picture of her dog. The picture is a rectangle, 300 millimeters wide and 150 millimeters tall. How many meters of ribbon will she need?

0.9 meter

Remember to check your calculations and make sure you answered the correct question.



5. Ann is putting carpet in a room that is 12 feet long and 10 feet wide. The carpet costs \$3.00 per square foot. How much will the carpet for the room cost?

\$360

6. For every 3 cans of vegetables purchased, you get 1 free can. Tessie went home with 32 cans of vegetables. How many cans did she have to pay for?

24 cans

7. Isabel ran around the track 6 times at the same rate of speed. It took her 24 minutes to run. John took 3 minutes to run around the track once. Which student ran faster? Explain.

John; Sample answer: It took Isabel $24 \div 6 = 4$ minutes to run around the track once.

8. **Construct Arguments** Badal has 120 cubic centimeters of water. He wants to pour it into a rectangular vase that is 4 centimeters high, 40 millimeters wide, and 5 centimeters long. Will all the water fit into the vase? Explain.

No; The volume of the vase is $4 \times 4 \times 5 = 80$ cubic cm, so not all of the water will fit into the vase.

9. **Higher Order Thinking** Nancy is saving \$2 from her allowance every week. Marco is saving \$1 the first week, \$2 the second week, \$3 the third week, and so on. At the end of 10 weeks, who will have saved more money? How much more?

Marco; Marco will have saved \$35 more than Nancy ($\$55 - \$20 = \35).

10. José is painting a backdrop for the school play. The rectangular backdrop is 60 inches by 45 inches. If his container of paint can cover 25 square feet, does he have enough to paint the backdrop?

Yes

HINT: Convert the dimensions from inches to feet.



Assessment Practice

11. Darin wants to put a fence around his garden. How much fencing should he buy?

- (A) 26 yards
- (B) 40 yards
- (C) 46 feet**
- (D) 120 feet

8 ft



5 yd