



Additional Practice 4-8

Use Number Sense to Multiply Decimals

Another Look!

Amelia can walk 3.6 miles in one hour.
How far can she walk in 2.1 hours?

$$3.6 \times 2.1 = 756$$

Use number sense to place the decimal
in the product.

75.6 and 756 are not reasonable answers.

Estimate: $3 \times 2 = 6$ and $4 \times 2 = 8$.

So the answer is between 6 and 8.

Amelia will walk 7.56 miles in 2.1 hours.

Use estimation and
number sense to help you
place the decimal point.



In **1–4**, the product is shown without the decimal point. Use
number sense to place the decimal point appropriately.

1. $6 \times 5.01 = 3006$

**Place the decimal point
between two zeros.**

2. $12.8 \times 3.2 = 4096$

**Place the decimal point
between 0 and 9.**

3. $4.06 \times 20.1 = 81606$

Place the decimal point between 1 and 6.

4. $24 \times 6.3 = 1512$

Place the decimal point between 1 and 2.

In **5–10**, tell whether or not the decimal point has been placed correctly in the
product. If not, rewrite the product with the decimal point correctly placed.

5. $0.6 \times 0.7 = 0.042$

Incorrect; 0.42

6. $1.1 \times 13.8 = 1.518$

Incorrect; 15.18

7. $8.06 \times 3 = 241.8$

Incorrect; 24.18

8. $19 \times 8.3 = 157.7$

Correct

9. $2.8 \times 345.1 = 966.28$

Correct

10. $56.2 \times 7.9 = 4,439.8$

Incorrect; 443.98

11. Jordan enters 3.4×6.8 into his calculator. He writes the digits 2312
from the display and forgets the decimal point. Where should
Jordan write the decimal point? Explain.

Between 3 and 1; Sample explanation: $3 \times 7 = 21$



12. Mrs. Cooper has \$20. Can she buy a museum ticket for her 10-year-old daughter, a ticket for herself, and a book that costs \$3.99? Explain.

Sample answer: No. The 2 tickets cost \$17, so the remaining \$3 is not enough to buy the book.

Science Museum	
Ticket	Price
Child	\$5.75
Adult	\$11.25

13. Estimate the product of 3.9 and 4.6 using mental math. Explain the method you used.

Sample answer: Using rounding, I changed the expression to 4×5 to get an estimate of 20.

14. **Reasoning** Will the actual product of 7.69×5 be greater than or less than its estimate of 8×5 ? Explain your reasoning.

Less than; 8 is greater than 7.69, so the actual product will be less than 40.

15. One serving of yogurt has 95 calories. What is a reasonable estimate for the number of calories in 2.5 servings of yogurt?

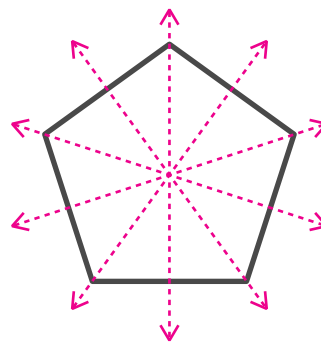
Sample answer: 250 calories

16. **Higher Order Thinking** Bruce jogs from his house to the library and back again to tutor students. The distance from his house to the library is 0.28 mile. If Bruce tutored at the library 328 days last year, about how many miles did he jog?

Sample answer: About 180 miles

17. Alicia drew a pentagon with equal side lengths and equal angles. Then she added red lines of symmetry to her drawing. How many lines did she draw? Use the picture to show how you know.

5 lines; check students' work



Assessment Practice

18. Which of the following is the missing factor?

_____ $\times 0.7 = 0.287$

- (A) 0.041
- (B) 0.41
- (C) 4.1
- (D) 41

19. Which two factors would give a product of 8.34?

- (A) 0.06 and 1.39
- (B) 0.06 and 13.9
- (C) 0.6 and 1.39
- (D) 0.6 and 13.9