



# Review

## Do You Know How?



### Investigating Decimal Patterns (2-7)

Find each product. Use mental math.

- |  |  |
|--|--|
| 1. $10 \times 3.69$<br><b>36.9</b>     | 2. $0.204 \times 100$<br><b>20.4</b>     |
| 3. $0.06 \times 10$<br><b>0.6</b>      | 4. $1,000 \times 17.55$<br><b>17,550</b> |
| 5. $100 \times 412.3$<br><b>41,230</b> | 6. $5.8 \times 1,000$<br><b>5,800</b>    |

## Do You Understand?



- A** Tell how you found each product.  
**See margin.**
- B** Why did you need to write extra zeros after the number before placing the decimal point in Exercise 6?  
**Sample answer: The decimal point must move right 3 places, but 5.8 has only one decimal place, so 2 zeros must be added.**

### Estimating Decimal Products (2-8)

Estimate each product.

**Sample estimates are given.**

- |                                       |   |
|---------------------------------------|---|
| 7. $4.3 \times 6$<br><b>24</b>        | 8. $7.06 \times 18.1$<br><b>140</b>     |
| 9. $3 \times 9.17$<br><b>27</b>       | 10. $0.89 \times 56.6$<br><b>57</b>     |
| 11. $107.4 \times 65$<br><b>6,500</b> | 12. $44.51 \times 72.3$<br><b>2,800</b> |

- C** Tell how you found the estimates in Exercises 11 and 12.  
**See margin.**
- D** Describe two ways to estimate the product in Exercise 9.  
**Sample answer: Round 9.17 to 9 and multiply by 3, to get 27; Round 9.17 to 10 and multiply by 3, to get 30.**

### Multiplying Whole Numbers and Decimals (2-9)

Find each product.

- |                                      |   |
|--------------------------------------|---|
| 13. $1.7 \times 4$<br><b>6.8</b>     | 14. $3 \times 7.8$<br><b>23.4</b>       |
| 15. $2 \times 0.02$<br><b>0.04</b>   | 16. $9.54 \times 67$<br><b>639.18</b>   |
| 17. $0.005 \times 9$<br><b>0.045</b> | 18. $6.004 \times 53$<br><b>318.212</b> |

- E** Tell how you found the products in Exercises 15 and 16.  
**See margin.**
- F** If you multiplied 0.007 by 203, how many decimal places would be in the product? Explain. **3; Sample answer: There are 3 decimal places in the factors, so there needs to be 3 decimal places in the product.**

### Using Grids to Multiply Decimals by Decimals (2-10)

#### Multiplying Decimals by Decimals (2-11)

Find each product.

- |   |                                       |
|---|---------------------------------------|
| 19. $0.6 \times 0.9$<br><b>0.54</b>     | 20. $7.8 \times 0.56$<br><b>4.368</b> |
| 21. $0.07 \times 6.92$<br><b>0.4844</b> | 22. $0.3 \times 0.1$<br><b>0.03</b>   |

- G** Tell how you found the products in Exercises 21 and 22.  
**See margin.**
- H** Does 4,094.28 seem reasonable for the product  $9.18 \times 44.6$ ? Explain.  
**No; Sample answer: A good estimate for  $9.18 \times 44.6$  is  $10 \times 40$  or 400, and 4,094.28 is not close to the estimate.**