

REVIEW: Multiplying and Dividing by Powers of 10

Name _____

Key Concept and Vocabulary

$$7 \times 1 = 7$$

$$7 = 10^1 = 7 \times 10 = 70.$$

$$7 \times 10^2 = 7 \times 100 = 700.$$

$$7 \div 1 = 7$$

$$7 \div 10^1 = 7 \div 10 = 0.7$$

$$7 \div 10^2 = 7 \div 100 = 0.07$$



Visual Models

$$7 \times 1 = 7$$

$$7 \times 10^1 = 70$$

$$7 \times 10^2 = 700$$

Hundreds	Tens	Ones	.	Tenths
		7	.	
	7	0	.	
7	0	0	.	

$$7 \div 1 = 7$$

$$7 \div 10^1 = 0.7$$

$$7 \div 10^2 = 0.07$$

Tens	Ones	.	Tenths	Hundredths
	7	.		
	0	.	7	
	0	.	0	7

Skill Examples

1. $600 \times 100 = 60,000$

2. $21,398 \div 10 = 2,139.8$

3. $905 \times 10^3 = 905,000$

4. $467 \div 10^2 = 4.67$

5. $3 \times 10^4 = 30,000$

6. $82 \div 10^3 = 0.082$

Application Example

7. A store owner orders 100 identical laptops. He pays \$49,999 in all. How much money does each laptop cost?

$$\$49,999 \div 100 = \$499.99$$

Each laptop costs \$499.99.

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Find the product or quotient.

8. $5 \times 1,000 = \underline{5,000}$

9. $12 \times 10,000 = \underline{120,000}$

10. $389 \times 10^1 = \underline{3,890}$

11. $44 \times 10^2 = \underline{4,400}$

12. $30 \div 100 = \underline{0.3}$

13. $601 \div 10 = \underline{60.1}$

14. $9,564 \div 10^2 = \underline{95.64}$

15. $225 \div 10^3 = \underline{0.225}$

16. $8,940 \div 10^2 = \underline{89.4}$

17. $26 \times 10^3 = \underline{26,000}$

18. $1 \div 10^3 = \underline{0.001}$

19. $34 \times 10^4 = \underline{340,000}$

Complete the equation.

20. $9 \times \underline{10^4} = 90,000$

21. $561 \div \underline{10^2} = 5.61$

22. $\underline{1,937} \div 10^3 = 1.937$

23. **TOTEM POLE** A totem pole is 240 inches tall. The totem pole is made of 10 wooden animals of the same height. How many inches tall is each animal? 24 inches