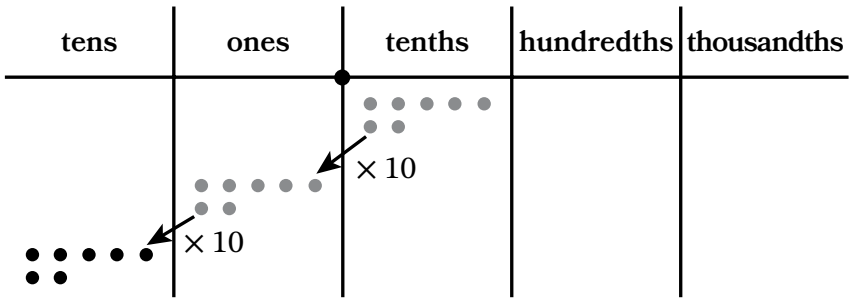
5

Name _____ Date _____

Use the place value chart to complete the equations.

1.

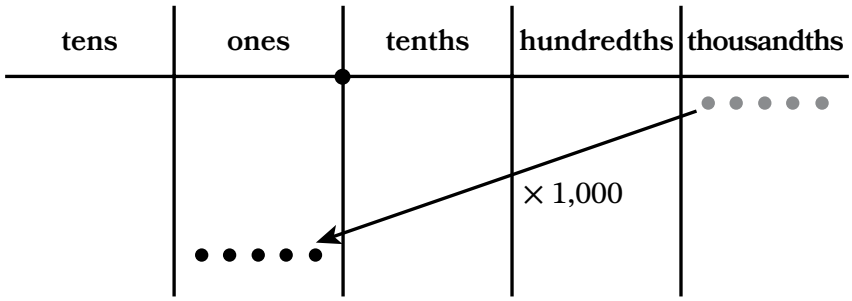


$0.7 \times 10 \times 10 =$ _____

$0.7 \times$ _____ $=$ _____

$0.7 \times 10^{\square} =$ _____

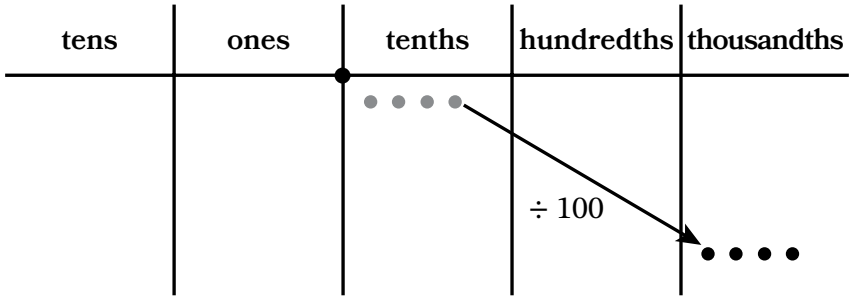
2.



$0.005 \times$ _____ $=$ _____

$0.005 \times 10^{\square} =$ _____

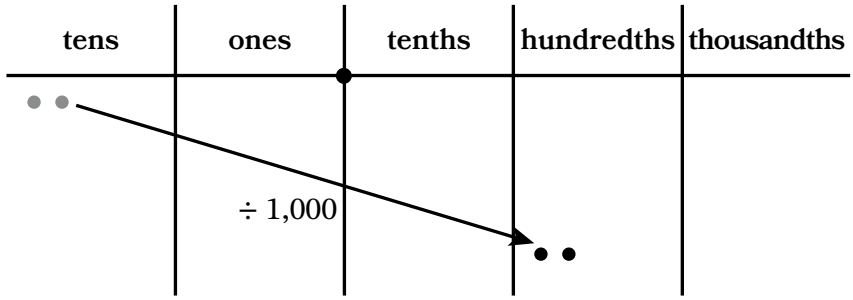
3.



$0.4 \div$ _____ $=$ _____

$0.4 \div 10^{\square} =$ _____

4.



$20 \div$ _____ $=$ _____

$20 \div 10^{\square} =$ _____

5. Consider the expression shown.

   1.056×10^3

   a. How does the exponent help you think about shifting the digits in the first factor to find the product?

   b. Find the product.

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6. Consider the expression shown.

   $2.7 \div 10^2$

   a. How does the exponent help you think about shifting the digits in the dividend to find the quotient?

   b. Find the quotient.

Find the product or quotient and write it in standard form.

7. $0.327 \times 10 =$ _____

8. $5.04 \div 10 =$ _____

9. $1.68 \times 10^2 =$ _____

10. $0.3 \div 10^2 =$ _____

11. $2.109 \times 10^3 =$ _____

12. $45 \div 10^3 =$ _____

13. Mrs. Chan weighs a watermelon and a kiwi. She asks her class to write an equation to show the relationship between the weight of the watermelon and the weight of the kiwi.

Fruit	Weight (kilograms)
Watermelon	7.6
Kiwi	0.076

Consider Sana's and Noah's equations.

Sana's Way	Noah's Way
$7.6 \div 100 = 0.076$	$7.6 \times \frac{1}{100} = 0.076$

Sana and Noah use different operations, but both equations are correct. How?

Find the quotient. Then write a related multiplication equation with exponential form expressed as a fraction.

14. $1.56 \div 10 =$ _____

$1.56 \times \frac{1}{10} =$ _____

15. $6.2 \div 10^2 =$ _____

$6.2 \times \frac{\square}{\square} =$ _____

16. $23.5 \div 10^2 =$ _____

$23.5 \times \frac{\square}{\square} =$ _____

17. $908 \div 10^3 =$ _____

$908 \times \frac{\square}{\square} =$ _____