

PART I GET STARTED**Today's Mathematics**

We will divide decimals using equivalent quotients and multiplication checks.

Essential Question

Why can we multiply both numbers in a division by the same power of ten?

DO NOW

1. 2.7×1.3

2. 0.8×0.5

3. $36.4 \div 2$

4. Write 1.2 as a fraction in simplest form.

SEE IT

How many 1.2-meter lengths fit into 4.56 meters? Compare $4.56 \div 1.2$ with $45.6 \div 12$. Predict whether the quotient changes.

QUICK WRITE | 2 MINUTES

Why must both the dividend and divisor change when making a whole-number divisor?

PART II INVESTIGATE**BUILD A MODEL AND LOOK FOR A PATTERN**

Scale the dividend and divisor by the same power of ten. Record an equivalent expression, solve, and verify by multiplication.

Expression	Equivalent division	Quotient	Multiplication check
$4.56 \div 1.2$			
$18.2 \div 1.4$			
$0.273 \div 0.39$			
$6.2 \div 4$			

COMPARE AND EXPLAIN

Why is $4.56 \div 1.2 = 45.6 \div 12$? Explain using equivalent fractions, then check with multiplication.

PART III MAKE SENSE AND PRACTICE**WHAT WE CAN CONCLUDE**

Multiply both the divisor and dividend by a power of ten that makes the divisor a whole number. Divide, align the quotient decimal with the new dividend, and add zeros when needed. Estimate and multiply quotient $\times$ divisor to check.

WORKED MODEL

$0.273 \div 0.39 = 27.3 \div 39 = 0.7$. Check: $0.7 \times 0.39 = 0.273$.

MUST DO

1. $18.2 \div 1.4$

2. $6.2 \div 4$

3. $21.643 \div 2.3$

4. $0.459 \div 0.51$

5. A 5.4-meter ribbon is cut into 0.45-meter pieces. How many pieces are made?

READY FOR MORE

A student writes $4.56 \div 1.2 = 4.56 \div 12$. Explain the error and find the correct quotient.

PART IV PUZZLE PRACTICE

Name _____

Date _____

DECODE THE MATHEMATICS REMINDER

Solve. Match each result to the answer bank. Write its letter in the numbered code boxes.

1. $4.56 \div 1.2$

2. $18.2 \div 1.4$

3. $0.273 \div 0.39$

4. $6.2 \div 4$

5. $3.12 \div 16$

6. $21.643 \div 2.3$

7. $0.459 \div 0.51$

8. $9.6 \div 1.2$

9. $57.8 \div 3.4$

ANSWER BANK

E: 0.195 A: 0.7 O: 0.9 L: 1.55 C: 13 H: 17 S: 3.8 T: 8 B: 9.41

CODE BOXES

1	2	3	4	5	6	7	8	9