

Grade 5 • Unit 5 Worksheet

Place Value Patterns and Decimal Operations

Name: _____

Date: _____

Part A • Decimals to Thousandths

1. Write 0.347 in three ways.

In words: _____

In expanded form: _____ + _____ + _____

As a fraction: _____

2. Fill in each blank with the correct value.

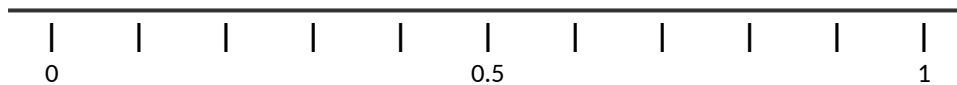
In 7.625, the 6 represents _____.

In 7.625, the 2 represents _____.

In 7.625, the 5 represents _____.

The 6 is _____ times as much as the 5. (Hint: think about place value relationships.)

3. On the number line below (0 to 1, marked at tenths), estimate where 0.625 would go.



Explain HOW you decided where to put 0.625.

Part B • Compare, Order, Round

4. Compare each pair using $<$, $>$, or $=$.

0.5 _____ 0.50

0.4 _____ 0.39

0.07 _____ 0.7

Explain how you compared 0.4 and 0.39:

-
5. Round 7.286 to:

(a) the nearest whole number: _____

(b) the nearest tenth: _____

(c) the nearest hundredth: _____

When you rounded to the nearest tenth, what made the answer 7.3 instead of 7.2?

6. Order these from LEAST to GREATEST: 0.4, 0.08, 0.43, 0.404, 0.408.

Order: _____, _____, _____, _____, _____

Part C • Add and Subtract Decimals

7. Find each.

a. $3.47 + 0.6 =$ _____

b. $8.5 - 2.37 =$ _____

c. $12.04 + 5.78 =$ _____

8. Mai aligned the decimals like this to add $3.47 + 0.6$: she wrote 3.47 over 0.6 with the 6 lined up under the 7. Is her alignment correct?

Is it right? Yes / No

Explain (or show the correct alignment):

The correct answer: _____

Part D • Multiply Decimals

9. Find 0.3×0.4 using a hundredths grid (shade a 0.3 by 0.4 rectangle on a 1x1 square).

Diagram:

How many hundredths are shaded? _____

What is 0.3×0.4 ? _____

Why is the answer SMALLER than both factors?

10. Find each product.

a. $5 \times 0.7 =$ _____

b. $1.5 \times 0.4 =$ _____

c. $2.4 \times 1.5 =$ _____

Part E • Divide Decimals • Thinking Deeply

11. Find each.

a. $8 \div 0.1 =$ _____ (how many tenths in 8?)

b. $0.6 \div 3 =$ _____

c. $2 \div 0.5 =$ _____

12. Diego says 'To multiply by 10, just move the decimal point one place to the right.'
Explain WHY this works using place value.

13. Han computed $0.4 + 0.5 = 0.9$ and $0.4 \times 0.5 = 0.20$. He thinks both answers look right.

Is $0.4 + 0.5 = 0.9$ correct? Yes / No

Is $0.4 \times 0.5 = 0.20$ correct? Yes / No

Explain why addition and multiplication of decimals give such different answers:
