

Decimal Place Value & Operations

Fill in each part when its number appears on the slide.

PART 1 • TARGET

I can compare and round decimals and add, subtract, multiply, and divide decimals using place value.

PART 2 • WARM-UP

1. Write 0.7 as a fraction and in words.

Key: $\frac{7}{10}$, seven tenths.

2. Which is greater: 0.5 or 0.45? Explain.

Key: 0.5, because 0.50 has 50 hundredths and 0.45 has 45 hundredths.

3. You buy a snack for \$1.25 and pay with \$2.00. How much change?

Key: \$0.75.

PART 3 • PREDICTION

Which is bigger: 0.5 or 0.45?

Circle one: ☐ 0.5 ☐ 0.45 ☐ They are equal

PART 4 • VOCABULARY

Word	Meaning
Tenths / hundredths / thousandths	The first, second, and third places to the right of the decimal point.
Expanded form	A number written as a sum of each digit's value ($3.45 = 3 + 0.4 + 0.05$).
Round	Change a number to a nearby, simpler value.
Power of ten	10, 100, 1,000... Multiplying by 10 moves each digit one place left.

PART 5 • PLACE VALUE

Each place is 10 times the place to its right. $0.4 = 40$ hundredths.

Check: In 4.382, what is the value of the 8?

Circle one: (A) 8 tenths (B) 8 ones (C) 8 thousandths (D) 8 hundredths

Key: (D) 8 hundredths. The 8 is in the hundredths place.

PART 6 • COMPARE DECIMALS

To compare decimals, line up the DECIMAL POINTS and compare from the LEFT.

Check: Which is greatest?

Circle one: (A) 0.069 (B) 0.607 (C) 0.7 (D) 0.65

Key: (C) 0.7. 7 tenths is more than 6 tenths.

PART 7 • ROUND

To round, look at the digit to the RIGHT. 5 or more rounds up.

Check: Round 7.863 to the nearest tenth.

Answer: _____

Key: 7.9. The hundredths digit is 6, so round up.

PART 8 • OPERATIONS

When adding decimals, line up the DECIMAL POINTS.

Check: $4.5 + 2.37 = ?$

Answer: _____

Key: 6.87. $4.50 + 2.37 = 6.87$.

PART 9 • WORKED EXAMPLE

1. Problem: 3.6×0.4 .
2. Step 1: Multiply as whole numbers: $36 \times 4 = 144$.
3. Step 2: Count decimal places: one in 3.6, one in 0.4 -> two in all.
4. Step 3: 1.44.
5. Check with an estimate: about $4 \times 0.4 = 1.6$. 1.44 is close, so it makes sense.

PART 10 • WE DO

Solve: 3.6×0.4 .

Answer: 1.44

PART 11 • YOU DO

Solve: $12.5 - 4.75$

Answer: _____

Key: 7.75. $12.50 - 4.75 = 7.75$.

PART 12 • WORK TIME: THE PLACE VALUE MUSEUM

Write each code piece as you earn it: Exhibit A: T Exhibit B: E Exhibit C: N Exhibit D: T Exhibit E: H

Final code: TENTH

PART 13 • WRAP-UP

Was your prediction in Part 3 right? One thing I learned today:

Key: \$0.75.