Unit 3 · Decimal Operations Cheat Sheet

Unit 3 focus: adding, subtracting and multiplying decimals

1 Big Idea

Add and subtract decimals by lining up the decimal points. Multiply as whole numbers, then count decimal places.

2 Important Vocabulary

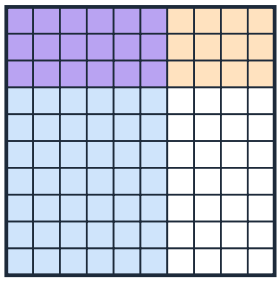
decimal point	The dot that separates the whole-number part from the parts of a whole.	In 12.5, the point is between 2 and 5
regroup	Trade 10 of one place for 1 of the next place (or the reverse).	10 hundredths = 1 tenth
decimal places	The number of digits to the right of the decimal point.	4.375 has 3 decimal places
estimate	A close answer found by rounding.	3.9 × 5.1 ≈ 4 × 5 = 20

3 How It Works

Multiply 2.4 × 1.5.

Example: 2.4 × 1.5
24 × 15 = 360
1 + 1 decimal places: 3.60
Answer: 3.6

4 Visual Model



0.3 × 0.6 = 0.18: the overlap is 18 of 100 small squares.

5 ★ Remember This · Watch Out!

★ Remember this

- Write zeros to fill empty places: 6.4 − 2.35 → 6.40 − 2.35.
- Estimate to place the decimal point: 4 × 2.9 ≈ 12.

⚠ Watch out!

- **Lining up the last digits:** line up the decimal points instead
- **Counting decimal places:** 0.2 × 0.4 = 0.08, not 0.8

6 Try It!

1. 7.3 − 2.65 = ?
   Answer: 4.65
2. 6 × 1.25 = ?
   Answer: 7.5

Answers are printed upside down. Turn the page to check!

Unit 3 · Decimal Operations Cheat Sheet

More practice: dividing decimals and solving money problems

1 Big Idea

To divide by a whole number, place the decimal point above the one in the dividend. To divide by a decimal, make the divisor a whole number first.

2 Important Vocabulary

sum	The answer to an addition problem.	1.2 + 0.5 = 1.7
difference	The answer to a subtraction problem.	3.4 − 1.1 = 2.3
unit price	The cost of one item or one unit.	$6.00 for 4 → $1.50 each
hundredths grid	A 10 by 10 square that shows one whole split into 100 equal parts.	35 squares shaded = 0.35

3 How It Works

Divide 3.6 ÷ 0.4.

Example: 3.6 ÷ 0.4
Multiply both by 10: 36 ÷ 4
Divide: 9

Answer: 9

4 Visual Model



$7.50 ÷ 3 = $2.50 for each friend.

5 ★ Remember This · Watch Out!

★ Remember this

- Check division with multiplication: 9 × 0.4 = 3.6.
- Money answers have two decimal places.

⚠ Watch out!

- **Moving only one decimal point:** move the point in BOTH numbers
- **Better buy:** compare the price of ONE item, not the totals

6 Try It!

1. 9.6 ÷ 3 = ?
   Answer: 3.2
2. You buy 2 pens at $1.35. Change from $5?
   Answer: $2.30

Answers are printed upside down. Turn the page to check!