Task 16: Adding & Subtracting Decimals

Add and subtract decimals to thousandths · Page 1 of 2

Directions: Solve each problem. Stack the numbers in the work space, lining up decimal points, and show all your steps.

1. Solve: 3.4 + 2.5

Answer: _____

2. Solve: 6.25 + 4.8

Answer: _____

3. Solve: 12.6 + 7.45

Answer: _____

4. Solve: 0.75 + 0.8

Answer: _____

5. Solve: 9.38 − 4.2

Answer: _____

6. Solve: 15.6 − 8.72

Answer: _____

Task 16: Adding & Subtracting Decimals

Add and subtract decimals to thousandths · Page 2 of 2

Directions (continued): Finish Task 16 with problems 7–12.

7. Solve: 20 − 3.45

Answer: _____

8. Solve: 5.24 − 2.6

Answer: _____

9. Solve: $12.50 + $4.75

Answer: _____

10. Word Problem: Maya bought a book for $8.99 and a pencil for $2.50. How much did she spend?

Answer: _____

11. Word Problem: A board is 3.25 m long. A piece 1.8 m is cut off. How much is left?

Answer: _____

12. Error Analysis: A student added 3.4 + 0.25 and got 0.59. Explain the mistake.

Answer: _____

TASK 17 · WORKED EXAMPLE

Multiplying Decimals

Multiply decimals by whole numbers and other decimals · 5.NBT.B.7

To multiply decimals, **ignore the decimal points** at first and multiply like whole numbers. Then count the **total number of decimal places** in the original factors, and put the decimal point in your answer so it has that many decimal places.

$$\begin{array}{r} 25 \\ \times\ 32 \\ \hline 50 \\ +\ 750 \\ \hline 800 \end{array}$$

2.5 × 3.2: multiply as whole numbers → 800. Count **2 decimal places** in the factors. Place the decimal: **8.00**.

Step 1: Ignore decimals. Multiply 25 × 32 using the standard algorithm = 800.

Step 2: Count decimal places in the factors. 2.5 has 1, 3.2 has 1. Total = **2 decimal places**.

Step 3: Place the decimal point in 800 so it has 2 decimal places: **8.00** (which equals 8).

Step 4: Check: 2.5 is about 3, and 3.2 is about 3. 3 × 3 = 9. Answer 8 is close — makes sense.

Estimate first! Round each decimal to the nearest whole number and multiply. Your actual answer should be close. This catches decimal-placement errors before they happen.

Try It: Solve 1.4 × 2.3.

Check your thinking: 3.22 (14 × 23 = 322; 2 decimal places total → 3.22)

Task 17: Multiplying Decimals

Multiply decimals by whole numbers and other decimals · Page 1 of 2

Directions: Solve each problem. Stack the numbers in the work space, lining up decimal points, and show all your steps.

1. Solve: 2.5 × 4

Answer: _____

2. Solve: 0.6 × 9

Answer: _____

3. Solve: 3.2 × 5

Answer: _____

4. Solve: 1.25 × 3

Answer: _____

5. Solve: 0.8 × 0.4

Answer: _____

6. Solve: 2.5 × 1.6

Answer: _____

Task 17: Multiplying Decimals

Multiply decimals by whole numbers and other decimals · Page 2 of 2

Directions (continued): Finish Task 17 with problems 7–12.

7. Solve: 4.3 × 2.7

Answer: _____

8. Solve: 0.25 × 12

Answer: _____

9. Solve: 6.5 × 0.4

Answer: _____

10. Word Problem: A notebook costs $3.75. How much for 6 notebooks?

Answer: _____

11. Word Problem: A ribbon is 0.8 m. How long are 7 ribbons?

Answer: _____

12. Error Analysis: A student solved 0.6 × 0.4 and got 2.4. Explain.

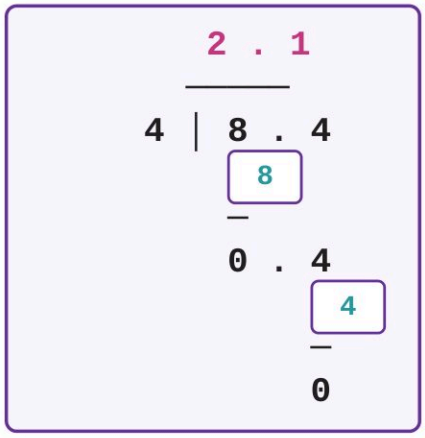
Answer: _____

TASK 18 · WORKED EXAMPLE

Dividing Decimals

Divide decimals by whole numbers and other decimals · 5.NBT.B.7

Dividing a decimal by a whole number: divide normally, but place the decimal point in the quotient directly above where it is in the dividend. **Dividing by a decimal:** shift the decimal in the divisor to make it a whole number, then shift the same number of places in the dividend.



8.4 ÷ 4 = 2.1 (decimal point goes straight up into quotient)

Step 1: For 8.4 ÷ 4: place the decimal point in the quotient directly above the one in 8.4.

Step 2: Divide as usual: 8 ÷ 4 = 2. Bring down the 4. 4 ÷ 4 = 1. **Answer: 2.1**.

Step 3: For 1.44 ÷ 0.4: multiply both by 10 to make divisor whole → 14.4 ÷ 4 = **3.6**.

Moving the decimal works because you're multiplying both numbers by the same power of 10 — which doesn't change the answer (the same factor in numerator and denominator cancels out).

Try It: Solve 6.25 ÷ 5.

Check your thinking: 1.25 (decimal in the quotient directly above the one in 6.25)

Task 18: Dividing Decimals

Divide decimals by whole numbers and other decimals · Page 1 of 2

Directions: Solve each problem. Stack the numbers in the work space, lining up decimal points, and show all your steps.

1. Solve: 8.4 ÷ 4

Answer: _____

2. Solve: 9.6 ÷ 3

Answer: _____

3. Solve: 6.25 ÷ 5

Answer: _____

4. Solve: 12.6 ÷ 6

Answer: _____

5. Solve: 7.2 ÷ 8

Answer: _____

6. Solve: 15.5 ÷ 5

Answer: _____

Task 18: Dividing Decimals

Divide decimals by whole numbers and other decimals · Page 2 of 2

Directions (continued): Finish Task 18 with problems 7–12.

7. Solve: 2.4 ÷ 0.4

Answer: _____

8. Solve: 3.6 ÷ 0.6

Answer: _____

9. Solve: 4.5 ÷ 0.9

Answer: _____

10. Word Problem: 4 friends split a $14.80 bill equally. How much per friend?

Answer: _____

11. Word Problem: A ribbon is 7.2 m long, cut into 0.8 m pieces. How many pieces?

Answer: _____

12. Error Analysis: A student solved 8.4 ÷ 4 and got 21 (no decimal). What mistake was made?

Answer: _____

TASK 19 · WORKED EXAMPLE

Decimal Word Problems

Multi-step real-world problems with decimals · 5.NBT.B.7

Decimal word problems often involve **money, measurement, or rates**. Read carefully and plan the steps BEFORE you calculate. Decide which operations you need — and remember that money problems always need 2 decimal places in the final answer.

1. **READ** — Understand what's happening
2. **PLAN** — What operations?
3. **SOLVE** — Show each step
4. **CHECK** — Does it make sense?

Read: **Problem:** Maya buys 3 notebooks at $4.25 each. She pays with a $20 bill. How much change?

Plan: Step A: Find total cost. 3 × $4.25. Step B: Subtract from $20.

Solve: Step A: 3 × $4.25 = **$12.75**. Step B: $20.00 − $12.75 = **$7.25**.

Check: Does it make sense? 3 notebooks for about $12, change from $20 ≈ $8. Close to $7.25. ✓

Money tip: always write dollar amounts with 2 decimal places, even when they look like whole dollars. $5 = $5.00. This keeps the math aligned and easier to check.

Try It: A gallon of milk costs $3.49. How much for 4 gallons?

Check your thinking: $13.96 (4 × $3.49)

Task 19: Decimal Word Problems

Multi-step real-world problems with decimals · Page 1 of 2

Directions: Complete each problem. Show your work in the box and write your final answer on the line.

1. Maya spends $8.50 on lunch and $3.25 on a drink. Total?

Answer: _____

2. A shirt costs $15.99. How much for 3 shirts?

Answer: _____

3. Tomás has $20. He spends $7.45. How much is left?

Answer: _____

4. 4 friends split $45.60 equally. How much per friend?

Answer: _____

5. A ribbon is 2.4 m long. How long are 5 ribbons?

Answer: _____

6. 6 kg of apples cost $12. What's the price per kg?

Answer: _____

Task 19: Decimal Word Problems

Multi-step real-world problems with decimals · Page 2 of 2

Directions (continued): Finish Task 19 with problems 7–12.

7. A recipe needs 0.75 cup sugar. How much for 4 batches?

Answer: _____

8. Maya ran 3.6 km. Zoe ran 4.25 km. Total distance?

Answer: _____

9. A board is 8.4 ft long. It's cut into 4 equal pieces. How long is each piece?

Answer: _____

10. Word Problem: A store sells apples at $1.25 per pound. Maya buys 3.5 lb. How much?

Answer: _____

11. Word Problem: A cup of water weighs 0.25 kg. What's the weight of 12 cups?

Answer: _____

12. Word Problem: Maya has $50. She buys 4 books at $8.99 each. How much is left?

Answer: _____