

Grade 6 · Adding, Subtracting, Multiplying and Dividing Decimals · Quiz

Common Core 6.NS.B.3 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

This 10-question multiple-choice quiz checks decimal skills from Common Core 6.NS.B.3. Choose one answer for each question. The explanation after each question shows the correct method and the usual decimal-point mistake.

Grade 6 Common Core: 6.NS.B.3

Questions

Question 1

What is $3.4 + 0.58$?

$$\begin{array}{r} 3.40 \\ + 0.58 \\ \hline \end{array}$$

Decimal points lined up.

- A. 3.98
- B. 0.92
- C. 9.2
- D. 3.92

Question 2

What is $15 - 6.37$?

- A. 9.37
- B. 8.37
- C. 9.63
- D. 8.63

Question 3

What is 0.6×0.4 ?

- A. 2.4
- B. 0.024
- C. 0.24
- D. 1.0

Question 4

What is 2.5×1.2 ?

- A. 30
- B. 0.3
- C. 3.7
- D. 3

Question 5

What is $8.4 \div 7$?

- A. 12
- B. 1.2
- C. 0.12
- D. 1.02

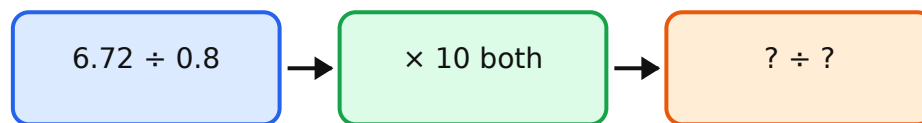
Question 6

What is $4.5 \div 0.05$?

- A. 9
- B. 90
- C. 900
- D. 0.9

Question 7

What is $6.72 \div 0.8$?

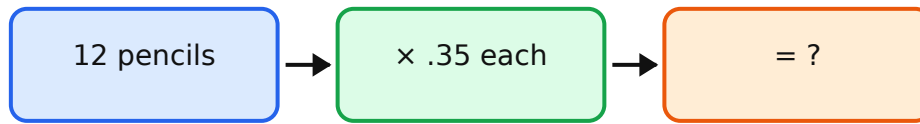


Make the divisor whole.

- A. 8.4
- B. 0.84
- C. 84
- D. 8.04

Question 8

Pencils at the school store cost \$0.35 each. How much do 12 pencils cost?



Total cost of 12 pencils.

- A. \$4.20
- B. \$42.00
- C. \$0.42
- D. \$3.50

Question 9

How many 0.75-foot pieces can be cut from a board that is 7.5 feet long?

- A. 1
- B. 100
- C. 10
- D. 6.75

Question 10

Which is the best estimate of 4.87×6.12 ?

- A. About 3
- B. About 30
- C. About 300
- D. About 24

Answer key

1. **A** - Line up the decimal points: $3.40 + 0.58 = 3.98$. Adding 34 and 58 without lining up the places gives 0.92 or 9.2.
2. **D** - Write 15 as 15.00, then subtract: $15.00 - 6.37 = 8.63$. Forgetting to borrow across the zeros gives answers such as 9.37.
3. **C** - $6 \times 4 = 24$, and the two factors have $1 + 1 = 2$ decimal places, so the product is 0.24. Adding the factors gives 1.0.
4. **D** - $25 \times 12 = 300$ with 2 decimal places gives $3.00 = 3$. Estimate: 2.5×1 is about 3, so 30 and 0.3 are not reasonable.
5. **B** - 7 goes into 8 once, leaving 1. Bring down 4 to get 14, and $14 \div 7 = 2$. The decimal point goes after the first digit: 1.2.
6. **B** - Multiply both numbers by 100: $450 \div 5 = 90$. Moving the decimal point only in the divisor changes the answer.
7. **A** - Multiply both numbers by 10 to get $67.2 \div 8 = 8.4$. Check: $0.8 \times 8.4 = 6.72$.
8. **A** - $35 \times 12 = 420$ with 2 decimal places gives \$4.20. Misplacing the decimal point gives \$42.00 or \$0.42.
9. **C** - $7.5 \div 0.75 = 750 \div 75 = 10$. Subtracting the lengths (6.75) does not count equal pieces.
10. **B** - Round to $5 \times 6 = 30$. An estimate of 24 comes from rounding 4.87 down to 4, which is too far from 4.87.

Remember:

- Line up decimal points before adding or subtracting, and fill gaps with zeros.
- The number of decimal places in a product equals the total in its factors.
- Dividing by a decimal: multiply dividend and divisor by the same power of 10.
- Dividing by a number less than 1 gives a quotient greater than the dividend.
- Estimate with rounded numbers to check that the decimal point is in the right place.