

Grade 7 - Multiplying and Dividing Rational Numbers - Quiz

Common Core 7.NS.A.2 · maths-pdf.fr/en/

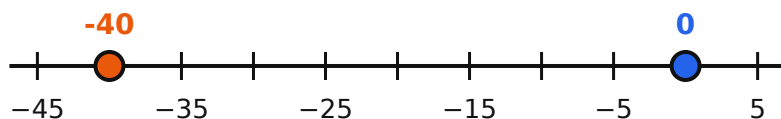
Name: _____ Class: _____ Date: ____/____/____

Answer all 10 multiple-choice questions on multiplying and dividing integers, fractions, and decimals, sign rules, and converting fractions to terminating or repeating decimals. Pick the single best answer, then read the explanation to see why it is right and which common mistake each wrong choice shows. A score of 8 or more means you are ready for the test.

Grade 7 · Common Core State Standards: **7.NS.A.2**

Questions

Question 1



What is -8×5 ?

- A. 40
- B. -13
- C. 3
- D. -40

Question 2

What is $-56 \div (-7)$?

- A. -8
- B. 49
- C. 8
- D. -49

Question 3

The product $(-1)(-2)(-3)(-4)$ is:

- A. 24
- B. -24

- C. -10
- D. 10

Question 4

What is $-\frac{3}{4} \div \frac{3}{8}$?

- A. $-\frac{9}{32}$
- B. -2
- C. $-\frac{1}{2}$
- D. 2

Question 5

What is $-0.4 \times (-0.5)$?

- A. -0.2
- B. 0.2
- C. 0.02
- D. 2

Question 6

Expression	Value
$7 \div 0$	?
$0 \div 7$	0

Which expression is undefined?

- A. $7 \div 0$
- B. $0 \div 7$
- C. $-7 \div 1$
- D. 0×7

Question 7

What is $\frac{7}{16}$ written as a decimal?

- A. 0.437
- B. 2.2857
- C. 0.0437
- D. 0.4375

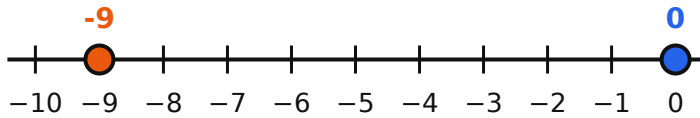
Question 8

Fraction	Denominator
$\frac{5}{6}$	6
$\frac{3}{16}$	16
$\frac{9}{20}$	20
$\frac{11}{25}$	25

Which of these numbers is a repeating decimal when written out?

- A. $\frac{3}{16}$
- B. $\frac{5}{6}$
- C. $\frac{9}{20}$
- D. $\frac{11}{25}$

Question 9



A diver goes down 1.5 meters every minute for 6 minutes. What is the change in depth as a signed number?

- A. 9 meters
- B. -7.5 meters
- C. -9 meters
- D. -4 meters

Question 10

What is the mean of -2 , -6 , and 5 ?

- A. -1
- B. -3
- C. 1
- D. -13

Answers

1. **D** - Different signs give a negative product. Adding the numbers is a common mistake.
2. **C** - Two negatives give a positive quotient: $56 \div 7 = 8$.
3. **A** - There are four negative factors, an even number, so the product is positive.
4. **B** - $-\frac{3}{4} \times \frac{8}{3} = -\frac{24}{12} = -2$. Multiplying instead of using the reciprocal gives $-9/32$.
5. **B** - Two negatives give a positive, and $4 \times 5 = 20$ with two decimal places gives 0.20.
6. **A** - Division by 0 is undefined. Zero divided by a nonzero number is 0.
7. **D** - Divide 7 by 16 to get 0.4375, which stops, so it terminates.
8. **B** - $\frac{5}{6} = 0.8333\ldots$ repeats. The denominators 16, 20, and 25 have only the prime factors 2 and 5, so those decimals stop.
9. **C** - $-1.5 \times 6 = -9$. The negative sign shows downward movement.
10. **A** - The sum is -3 , and $-3 \div 3 = -1$.

Remember

- Same signs: positive. Different signs: negative.
- An even number of negative factors gives a positive product; an odd number gives a negative product.
- Divide by a fraction by multiplying by its reciprocal.
- Division by 0 is undefined.
- A fraction is a terminating decimal or a repeating decimal, found by long division.