

Algebra: Integer Operations

Practice Worksheet • numberbender.com



Name: _____

Date: _____

Score: ____ / 10

DIRECTIONS

Add, subtract, multiply, or divide the integers as indicated. Use the number line to help visualize direction when needed.

1. Add: $(-8) + (-5)$ Answer: _____	2. Add: $(-12) + 7$ Answer: _____
3. Subtract: $9 - (-4)$ Answer: _____	4. Subtract: $(-6) - (-3)$ Answer: _____
5. Multiply: $(-4) \times (-7)$ Answer: _____	6. Multiply: $6 \times (-9)$ Answer: _____
7. Divide: $(-36) \div 4$ Answer: _____	8. Divide: $(-48) \div (-6)$ Answer: _____
9. Simplify: $(-3) + 10 - (-2)$ Answer: _____	10. Simplify: $(-5) \times 2 + (-4)$ Answer: _____

Based on the Numberbender lesson "How to Add, Subtract, Multiply, and Divide Integers" • youtu.be/P_VsM5mNzRs

Answer Key & Solutions

Algebra: Integer Operations • Numberbender

TEACHER NOTES

Items 1-4: addition and subtraction using number-line thinking. Items 5-6: same-sign multiplication (positive result). Items 7-8: opposite-sign multiplication/division (negative result). Items 9-10: mixed operations — apply PEMDAS.

1. Add: $(-8) + (-5)$

Answer: -13

Both negative: add absolute values, keep sign. $| -8 | + | -5 | = 13$.

2. Add: $(-12) + 7$

Answer: -5

$| -12 | > | 7 |$; subtract 7 from 12, keep negative sign.

3. Subtract: $9 - (-4)$

Answer: 13

Subtracting a negative adds: $9 + 4 = 13$.

4. Subtract: $(-6) - (-3)$

Answer: -3

$(-6) + 3 = -3$; subtracting a negative becomes addition.

5. Multiply: $(-4) \times (-7)$

Answer: 28

Neg \times Neg = Pos; $4 \times 7 = 28$.

6. Multiply: $6 \times (-9)$

Answer: -54

Pos \times Neg = Neg; $6 \times 9 = 54$.

7. Divide: $(-36) \div 4$

Answer: -9

Neg \div Pos = Neg; $36 \div 4 = 9$.

8. Divide: $(-48) \div (-6)$

Answer: 8

Neg \div Neg = Pos; $48 \div 6 = 8$.

9. Simplify: $(-3) + 10 - (-2)$

Answer: 9

$(-3) + 10 + 2 = 9$; the double negative becomes +2.

10. Simplify: $(-5) \times 2 + (-4)$

Answer: -14

Multiply first: $-5 \times 2 = -10$; then $-10 + (-4) = -14$.