Whole Numbers Example

Check which operations keep whole-number inputs in the whole numbers.

PROBLEM

24 + 16, 24 - 16, 24 x 16, 24 / 16

Step-by-step solution

1

Add

The sum is a nonnegative integer.

24 + 16 = 40

2

Subtract

This order gives a nonnegative integer difference.

24 - 16 = 8

3

Multiply

The product is a whole number.

24 x 16 = 384

4

Divide

The quotient is not an integer, so it is not whole.

24 / 16 = 3/2 = 1.5

ANSWER

40, 8, and 384 are whole; 1.5 is not.

Check: 1.5 x 16 = 24.

The exact form and verification are shown above.