



Name: _____

Date: _____

Mathematics Note Taking

Topic: Inverse Operation- Multiplication to Division (Vice Versa)

In mathematics, the word inverse refers to the opposite of another operation (equation).

Inverse means there is an inverse (opposite) relationship between division and multiplication which is just like there was between addition and subtraction.

Multiplication and division are inverse operations.

This means that they are opposites.

All multiplication sentences can be written as division sentences and vice versa.

Every multiplication sentence can be written as **TWO** division sentences.

For example:

1. The division equation $45 \div 5 = 9$ has the inverse relationships:

$$5 \times 9 = 45 \quad \text{or} \quad 9 \times 5 = 45$$

2. Similar relationships exist for multiplication.

The equation $3 \times 7 = 21$ has the inverse relationships

$$21 \div 3 = 7 \quad \text{or} \quad 21 \div 7 = 3$$

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