

Key Vocabulary:

Equation - a mathematical statement containing an equals sign, showing that two numbers or expressions have the same value

Inverse operation - opposite, reverse operations

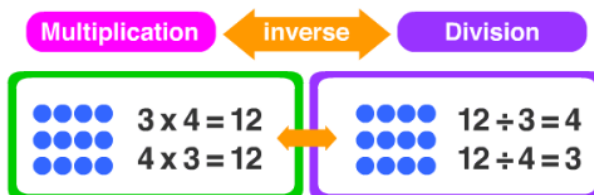
Operation - a process or action (such as addition, subtraction, multiplication, and division) in which numbers are acted upon according to a set of rules

Unknown - a missing value in a problem

Variable - a symbol (often a letter) that stands for an unknown value

Key Ideas:

Students understand division as an unknown factor situation. They visualize problem contexts and write equations to represent the problem. They use equations to determine the operations needed to solve the problems. They understand the inverse relationship between multiplication and division and use that knowledge strategically to solve for unknown quantities, and know that variables (letters or symbols) can be used to represent unknown values.



There are 3 bowls with 7 strawberries in each bowl. How many strawberries are there?

$$3 \times 7 = n$$

If 21 strawberries are shared equally in 3 bowls, then how many strawberries will be in each bowl?

$$21 \div 3 = n$$

or

$$3 \times n = 21$$

In the problem above, a student might solve by dividing OR by thinking "What number times 3 equals 21?", regardless of which equation they write.

Sample Problems:

If 24 trees are to be planted equally in 3 rows, how many trees will be planted in each row?

Chantelle has 56 stickers. She will give all of the stickers to 8 friends. Each friend will receive the same number of stickers. Which equation will help Chantelle decide how many stickers, n , to give to each friend?

- A. $n \div 8 = 56$
- B. $8 \times n = 56$
- C. $56 - n = 48$
- D. $56 - 8 = n$

What value for m makes this equation true?

$$m \div 7 = 7$$

- A. 1
- B. 14
- C. 42
- D. 49