

Conditions

If my work says use cross products to solve each proportion what I'm supposed to do?

Solution

In mathematics, two variables are proportional if a change in one is always accompanied by a change in the other, and if the changes are always related by use of a constant. The constant is called the coefficient of proportionality or proportionality constant. Alternatively, we can say that one of the variables is proportional to the other.

If one variable is always the product of the other and a constant, the two are said to be directly proportional. x and y are directly proportional if the ratio is constant.

If the product of the two variables is always equal to a constant, the two are said to be inversely proportional. x and y are inversely proportional if the product is constant.

For example, you have a following proportion:

$$\frac{a}{b} = \frac{c}{d}$$

To use cross product is to solve it by using the next formula:

$$ad = bc$$

It's named cross product as you product the first numerator with the second denominator, and the second numerator with the first denominator. This reminds a cross turn.

Answer:

To solve the proportion with a general type

$$\frac{a}{b} = \frac{c}{d}$$

with using a cross product, you must use formula

$$ad = bc$$