

PROPORTION

- A proportion is an equation with a ratio on each side. It is a statement that two ratios are equal.
 $3/4 = 6/8$ is an example of a proportion.
- When one of the four numbers in a proportion is unknown, cross products may be used to find the unknown number. This is called solving the proportion. Question marks or letters are frequently used in place of the unknown number.
- Example:
- Solve for n : $1/2 = n/4$.
 - Using cross products we see that $2 \times n = 1 \times 4 = 4$, so $2 \times n = 4$.
 - Dividing both sides by 2, $n = 4 \div 2$ so that $n = 2$.
- Example Word problem
 - If 4 tickets to a show cost \$9.00, find the cost of 14 tickets.
 - Note:
 - The problem gives 3 number and asks for a 4th.
 - When setting up the proportion label each number--make certain that tickets are on the same level with tickets and \$ are on the same level.
 - 9 dollars X =
 - 4 tickets 14.
 - $4x = 126$
 - $x = \$31.50$