Name _____   Date _____

Rearranging and Understanding Formulas - Guided Lesson Explanation

We need to remember that the following operations are the inverse of each other.

Multiplication and Division

Addition and Subtraction

This means that they can undo each other.

The goal of all of these is to rearrange the formulas and get p by itself. We take all the necessary steps to do so.

Explanation#1

$$\frac{5\,x+p}{f} = 8$$ Multiply both sides by f.

$5x + p = 8f$ Subtract both sides by 5x.

$p = 8f - 5x$

Explanation#2

$4u = \dfrac{p}{6}\,(5y - 10q)$

$24u = p\,(5y - 10q)$ Multiply both sides by 6.

$\dfrac{24u}{(5y - 10q)} = p$ Divide both sides by (5y - 10q).

Explanation#3

This one is a piece of cake compared to everything else.

$f = rpt$ p is being multiplied by r and t.

$\dfrac{f}{rt} = p$ We can divide both sides r and t to get p by itself.