

Reteaching Page

2.5 Solving Subtraction Equations

When an equation contains a **variable**, you make alterations with the purpose of getting the variable to be alone.

Since subtraction is not commutative, you will want to consider using **fact families**, **write the problem backwards**, or **inverse operations** to help isolate the variable. (Writing the problem “backwards” is the same thing as using the addition side of the fact family).

Fact Family

$$\begin{aligned} 19 - a &= 7 \\ 19 - 7 &= a \end{aligned}$$

Backwards

$$\begin{aligned} 19 - a &= 7 \\ 7 + a &= 19 \end{aligned}$$

Inverse Operation

$$\begin{aligned} 19 - a &= 7 \\ 19 + (a - a) &= 7 + a \\ 19 &= 7 + a \end{aligned}$$

Write each of the following “backwards” to get rid of the subtraction.

$38 - a = 27$

$a - 16 = 36$

$24 - a = 12$

$37 - a = 22$

Rewrite each problem to remove the subtraction, then solve for n in the following equations.

_____ 1) $n - 7 = 12$

_____ (hint – write it backwards)

_____ 2) $n - 38 = 52$

_____ (hint – write it backwards)

_____ 3) $18 - n = 4$

_____ (hint – use the fact family)

_____ 4) $41 - n = 16$

_____ (hint – use the fact family)
