2.6 Solving Subtraction Equations

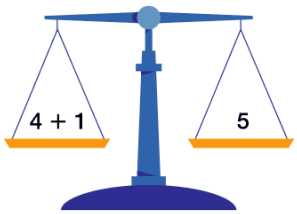
p. 74 3/19/18

Mar 13-11:27 AM

Think of equations like a balance scale.

Both sides must have the same quantity to be balanced.

If you add something to one side, you have to add the same thing to the other side.



Mar 13-11:33 AM

Solve $y - 23 = 39$. Check your answer.

$y - 23 = 39$ *23 is subtracted from y.*

$+23 \quad +23$ *Add 23 to both sides to undo the subtraction.*

$y = 62$

Check $y - 23 = 39$

$62 - 23 \stackrel{?}{=} 39$ *Substitute 62 for y in the equation.*

$39 \stackrel{?}{=} 39 \checkmark$ *62 is the solution.*

Addition is the inverse, or opposite, of subtraction. If an equation contains subtraction, solve it by adding to both sides to "undo" the subtraction.

Mar 13-2:11 PM

Solve $78 = s - 15$. Check your answer.

$+15 \quad +15$

$93 = s$

$s = 93$

$s - 15 = 73$

$78 \stackrel{?}{=} 93 - 15$

$78 = 78 \checkmark$

$\begin{array}{r} 93 \\ -15 \\ \hline 78 \end{array}$

Mar 13-2:33 PM

Solve $z - 3 = 12$. Check your answer.

$+3 \quad +3$

$z = 15$

$15 - 3 \stackrel{?}{=} 12$

$12 = 12 \checkmark$

Mar 13-2:34 PM

Solve $a - 4 = 7$. Check your answer.

$+4 \quad +4$

$a = 11$

$11 - 4 \stackrel{?}{=} 7$

$7 = 7 \checkmark$

Mar 13-2:13 PM

Solve $57 = c - 13$. Check your answer.

$C - 13 = 57$
$+13 \quad +13$
$C = 70$

$57 \stackrel{?}{=} 70 - 13$
$57 = 57 \checkmark$

Mar 13-2:35 PM

Solve $g - 62 = 14$. Check your answer.

$+62 \quad +62$
$g = 76$

$76 - 62 \stackrel{?}{=} 14$
$14 = 14 \checkmark$

76
62
14

Mar 13-2:35 PM

Solve the equation. Check your answer.

1. $x + 9 = 21$
$-9 \quad -9$
$x = 30$

$30 - 9 \stackrel{?}{=} 21$
$21 = 21 \checkmark$

2. $14 = x + 3$
$-3 \quad -3$
$11 = x$
$x = 11$

$14 \stackrel{?}{=} 11 - 3$
$14 = 14 \checkmark$

Mar 13-2:36 PM

Solve the equation. Check your answer.

3. $x - 7 = 11$
$+7 \quad +7$
$x = 18$

$18 - 7 \stackrel{?}{=} 11$
$11 = 11 \checkmark$

4. $16 = x - 14$
$+14 \quad +14$
$30 = x$
$x = 30$

$16 \stackrel{?}{=} 30 - 14$
$16 = 16 \checkmark$

Mar 13-2:36 PM

Solve the equation. Check your answer.

5. $x - 9 = 11$
$+9 \quad +9$
$x = 20$

$20 - 9 \stackrel{?}{=} 11$
$11 = 11 \checkmark$

Mar 13-2:36 PM

H.W: Pg. 79 #'s 7-29
*Complete wkst from Friday.

Mar 15-8:49 AM