Example 3

...continued

Verify the solution.

$13x - 8y + 11 = 0$

Left Side	Right Side
$13x - 8y + 11$ $13\left(-\frac{269}{115}\right) - 8\left(-\frac{279}{115}\right) + 11$ 0	0
LS = RS	

$3x + 7y = -24$

Left Side	Right Side
$3x + 7y$ $3\left(-\frac{269}{115}\right) + 7\left(-\frac{279}{115}\right)$ -24	-24
LS = RS	

Check Up

1. Solve the system of equations. Verify the solution.

   $y - 3x = 14$

   $6x = 19 + 4y$

☑ Compare your answer.

1. Solve the system of equations. Verify the solution.

$y - 3x = 14$

$6x = 19 + 4y$

$y - 3x = 14$

$y = 14 + 3x$

$6x = 19 + 4y$

$6x = 19 + 4(14 + 3x)$

$6x = 19 + 56 + 12x$

$-6x = 75$

$x = -\frac{75}{6}$

$x = -\frac{25}{2}$

$y = 14 + 3x$

$y = 14 + 3\left(-\frac{25}{2}\right)$

$y = \frac{28}{2} - \frac{75}{2}$

$y = -\frac{47}{2}$

The solution is $\left(-\frac{25}{2}, -\frac{47}{2}\right)$.

Verify the solution.

$y - 3x = 14$

Left Side	Right Side
$y - 3x$	14
$-\frac{47}{2} - 3\left(-\frac{25}{2}\right)$	
14	
LS = RS	

$6x = 19 + 5y$

Left Side	Right Side
$6x$	$19 + 4y$
$6\left(-\frac{25}{2}\right)$	$19 + 4\left(-\frac{47}{2}\right)$
-75	-75
LS = RS	