

# Activity 9 Assessment

## Modelling and Solving Multi-Step Linear Equations

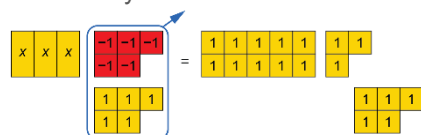
### Modelling and Solving Multi-Step Linear Equations

Creates an equation involving two operations

I started with the equation  $x = 6$ .  
I multiplied both sides by 3.  
 $3x = 18$   
Then, I subtracted 5 from each side.  
 $3x - 5 = 13$

Solves a multi-step equation involving whole numbers using concrete materials or informal solution methods

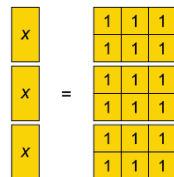
I used algebra tiles to solve  
 $3x - 5 = 13$ .  
I added 5 yellow 1-tiles to each side.



I removed zero pairs.



I arranged the tiles in 3 equal groups.



$x = 6$

Solves multi-step equations involving whole numbers symbolically

$$\begin{aligned} 3x - 5 &= 13 \\ 3x - 5 + 5 &= 13 + 5 \\ 3x &= 18 \\ \frac{3x}{3} &= \frac{18}{3} \\ x &= 6 \end{aligned}$$

Verifies that the solution to a multi-step equation is correct

To check if my solution is correct, I substituted the number I got for  $x$  in the original equation and compared each side.

$$\begin{aligned} \text{L.S.} &= 3x - 5 \\ &= 3(6) - 5 \\ &= 18 - 5 \\ &= 13 \\ \text{R.S.} &= 13 \end{aligned}$$

The solution is correct.

### Observations/Documentation