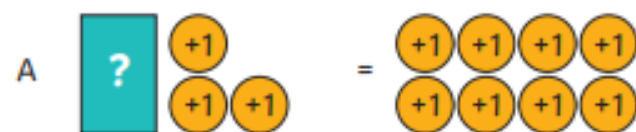


a) State which representation matches the equation  $x + 3 = 8$ .



b) Write down the two equations shown by the other two representations.

c) What is the value of  $x$  in each equation?

a)  $x + 3 = 8$  is A

b) The other representations show the following equations:

B:  $3x = 9$

C:  $x + 3 = 6$

c)  $x + 3 = 8, x = 5$     $3x = 9, x = 3$     $x + 3 = 6, x = 3$

Does each bar model match the equation?  
Explain your answer.

$$3x = 30$$

3	$x$
30	

$$30 = x + 15$$

$x$	15
30	

$$x + 3 = 30$$

$x$	$x$	$x$
30		

The first equation does not match as the bar model shows  $x + 3 = 30$ .  
The second equation matches as the bar model shows  $x + 15 = 30$ .  
The third equation does not match as the bar model shows  $3x = 30$ .

Is the value of the letter  $x$  the same in both equations? Prove your answer and explain your reasoning.

$$x + 74.5 = 125$$

$$4x = 202$$

The value of  $x$  in both equations is 50.5.