

## 8.EE.C.7a ADDITIONAL PRACTICE Answer Key

- 1) What is the value of  $x$  in the equation  
 $-7 = 5 - 3x$ ?

4

- 2) What value of  $b$  makes the equation  
 $2 + 8b = 11 + 4b$  true?

$\frac{9}{4}$  or 2.25

- 3) Complete the equation below for  $A$  and  $B$   
so that there are infinitely many solutions.

$$-2 - 4x + 7 = Ax + B$$

A = -4; B = 5

- 4) How many solutions does the equation  
 $3 - x = x + 3$  have? If one, provide the  
solution.

One solution;  $x = 0$

- 5) How many solutions does the equation  
 $-3x = -x + 1$  have? If one, provide the  
solution.

One solution;  $x = -\frac{1}{2}$

- 6) How many solutions does the equation  
 $-2x + 1 = 3 - 2x$  have? If one, provide the  
solution.

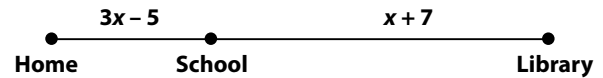
No solution

## 8.EE.C.7a ADDITIONAL PRACTICE (cont'd) Answer Key

- 7) Jack and Jill solved the following equation  $-2x - 2 + 5x = 3x - 2$ . Jack claims that  $x = 0$  is a solution. Jill claims that  $x = -2$  is a solution. Who is correct?

Both are correct; the equation has infinitely many solutions

- 8) The distance from Nia's home to school can be represented by the expression  $3x - 5$ . The distance from Nia's school to the library can be represented by the expression  $x + 7$ . If the distance from Nia's home to the library is 12 miles, what is the value of  $x$ ? How far is the library from the school?



$x = \frac{5}{2}$  or 2.5; 9.5 miles

- 9) The perimeter of a rectangular picture frame is 50 inches. If the frame's width is 9 inches, determine its length.

16 inches

- 10) In one basketball game, Esha scored 18 points. This was 4 points less than twice the amount of points that Victoria scored. How many points did Victoria score?

11 points