**Title** (primary CCSS Math with Title) A-REI.B3 Solve linear equations with one variable.

**Alignment to Content Standards**: CCSS.MATH.CONTENT.HSA.REI.B.3

**Tasks**

Find the error(s) in the following solutions to the linear equations. Once the error(s) is found state how to change it and resolve the problem.

1. **-2(x+5)+7= 10** Solve this problem correctly:

Here is how Emily solved for x:

-2(x+5)+7= 10

-2x +10+7=10

-2x +17=10

-17 -17

=

x=

Error(s):



Here is how John solved for x:

Solve this problem correctly:

-(5x+6)+10=(10) 2x

-5x+6+10=20x

-5x+16=20x

-16 -16

-5x =20x-16

-20x -20x

=

x=

Error(s):

**Commentary:**

This task is made to build the skill of students find error in their own work. As teacher, we have seen many errors when it comes to solve for x. The big errors I see when I look at student works is forget to multiplied a number with a negative or forget to put the negative. In this task the error are all around forget to multiplied with negatives.

**Solution**

1. -2(x+5)+7= 10

-2x -10+7=10

-2x - 3=10

+3 +3

=

x=

The error in this solution is between line 1 and 2. Emily multiplied 2 times 5 when she should have multiplied -2 times 5. Due to this error the whole solution is wrong.

2.

-(5x+6)+10=(10) 2x

-5x-6+10=20x

-5x+4=20x

-4 -4

-5x =20x-4

-20x -20x

=

x=

The error in this solution is between line 1 and 2. John forgets to distribute the negative to the 6. Due to this error the whole solution is wrong.