**4.2 Solving Inequalities using Addition & Subtraction**

***EQ:*** ***How do we use what we know about solving equations to solve inequalities?***

**Main Idea:** Solving inequalities is similar to solving equations in that you have to **ISOLATE the** **VARIABLE ALL by itself** on the **LEFT SIDE** of the inequality sign by using **INVERSE OPERATIONS.**

Ex: These are all SOLVED inequalities:

Y > -1 B < -5.5 R < 8.75 D > 19

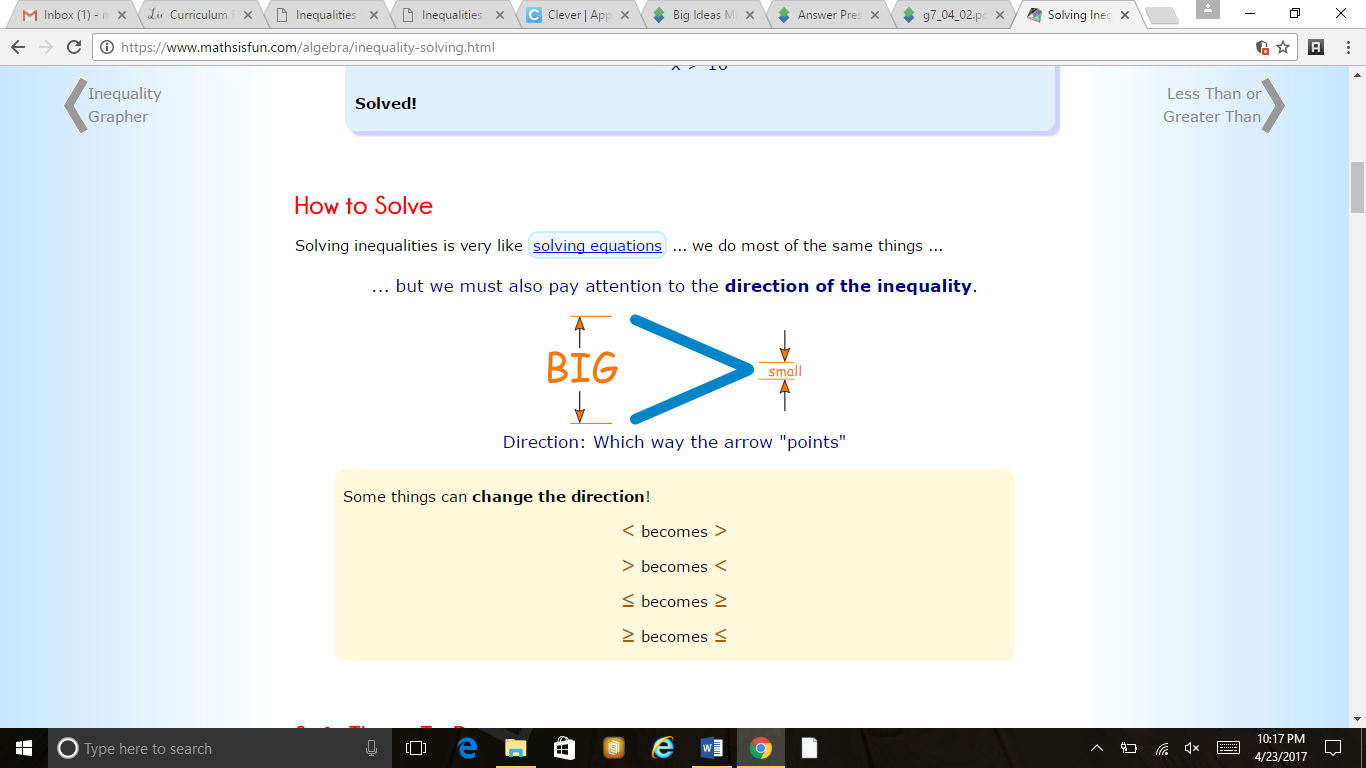
**REMEMBER:** The VARIABLE **SHOULD** be on the **LEFT SIDE** of the INEQUALITY so that it can be easily graphed!

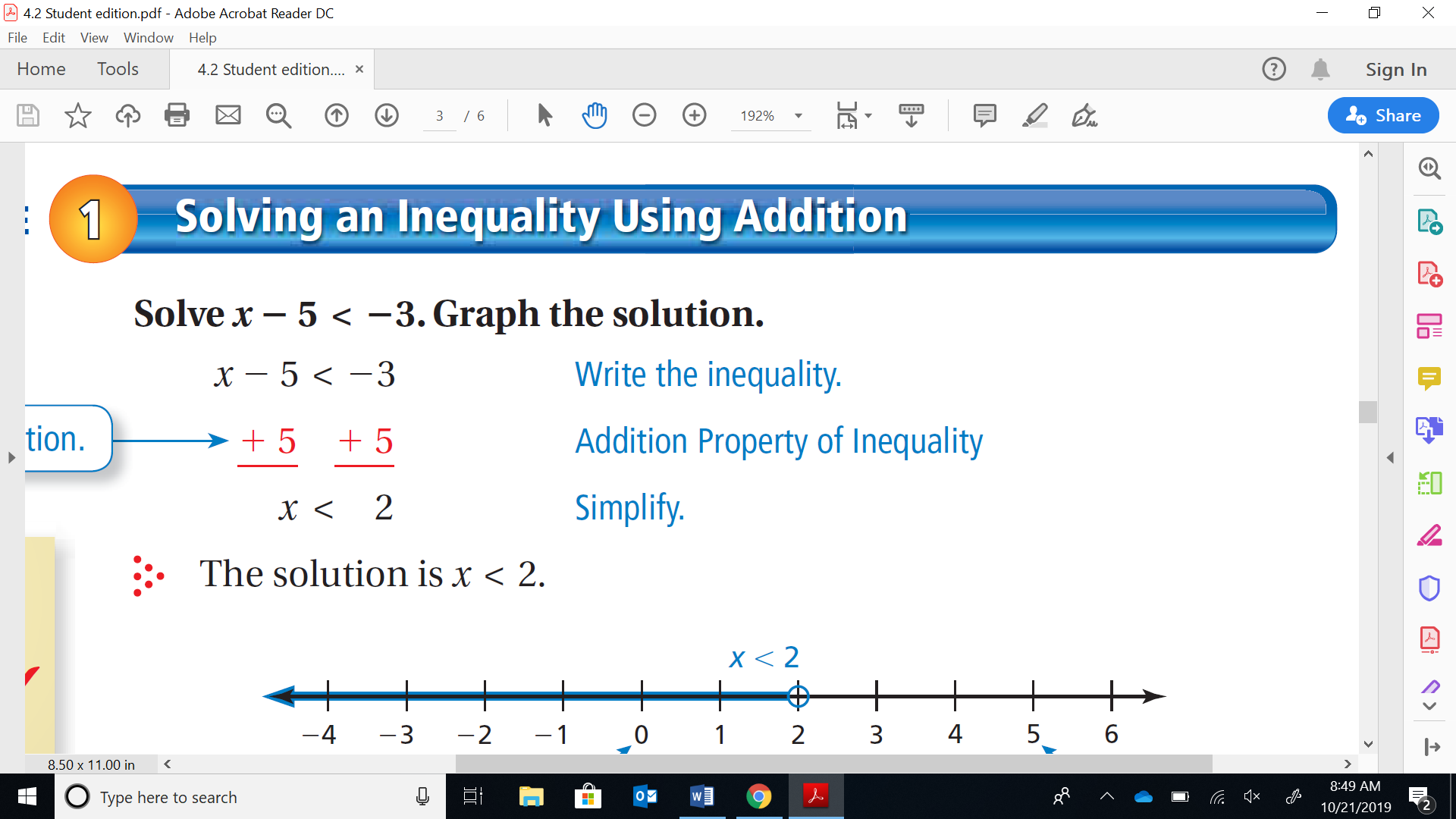
**\***IF the variable is on the RIGHT when solved:

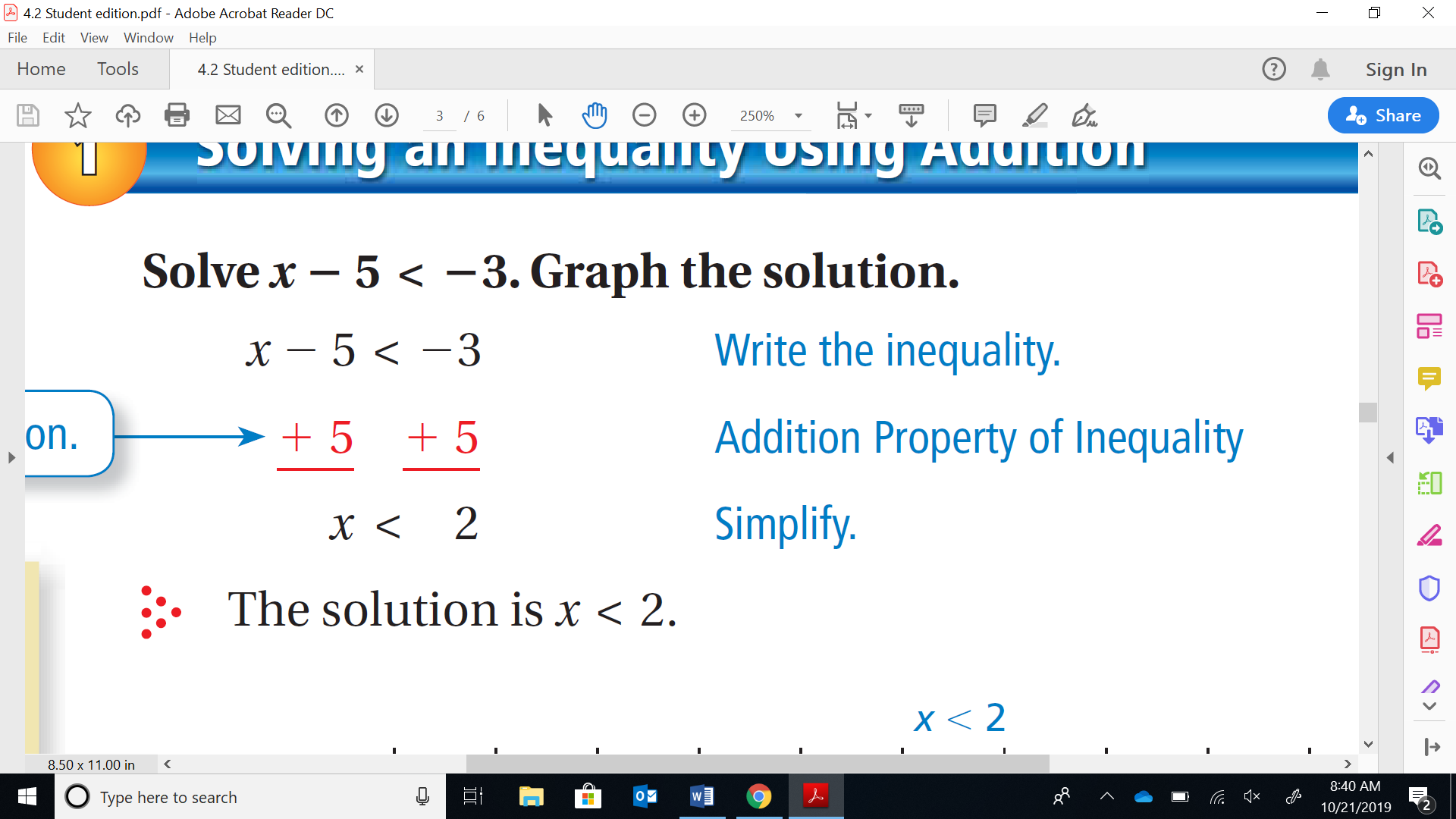
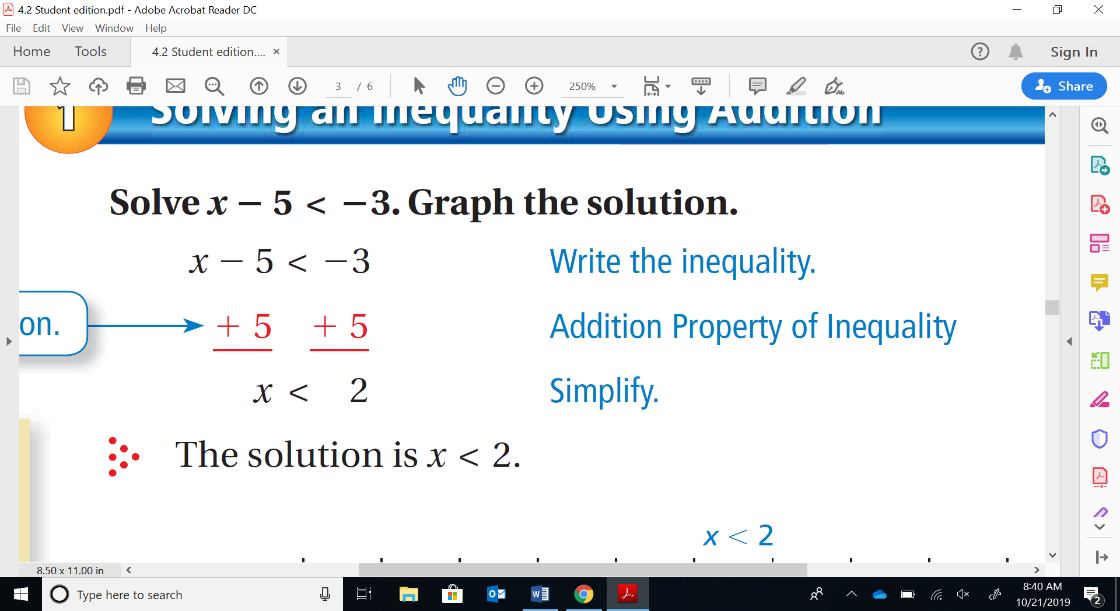
**SWITCH the VARIABLE with the NUMBER** AND **FLIP the INEQUALITY SIGN!**

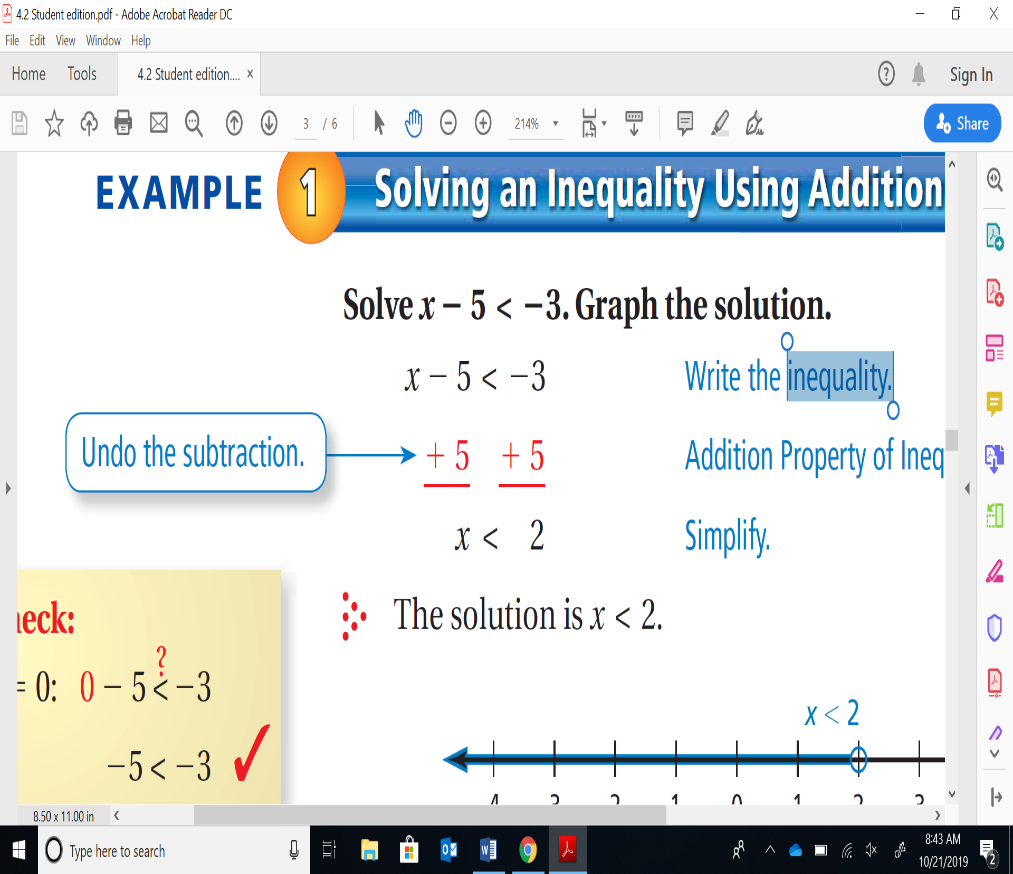
**EX:** 4 **>** D becomes D **<** 4

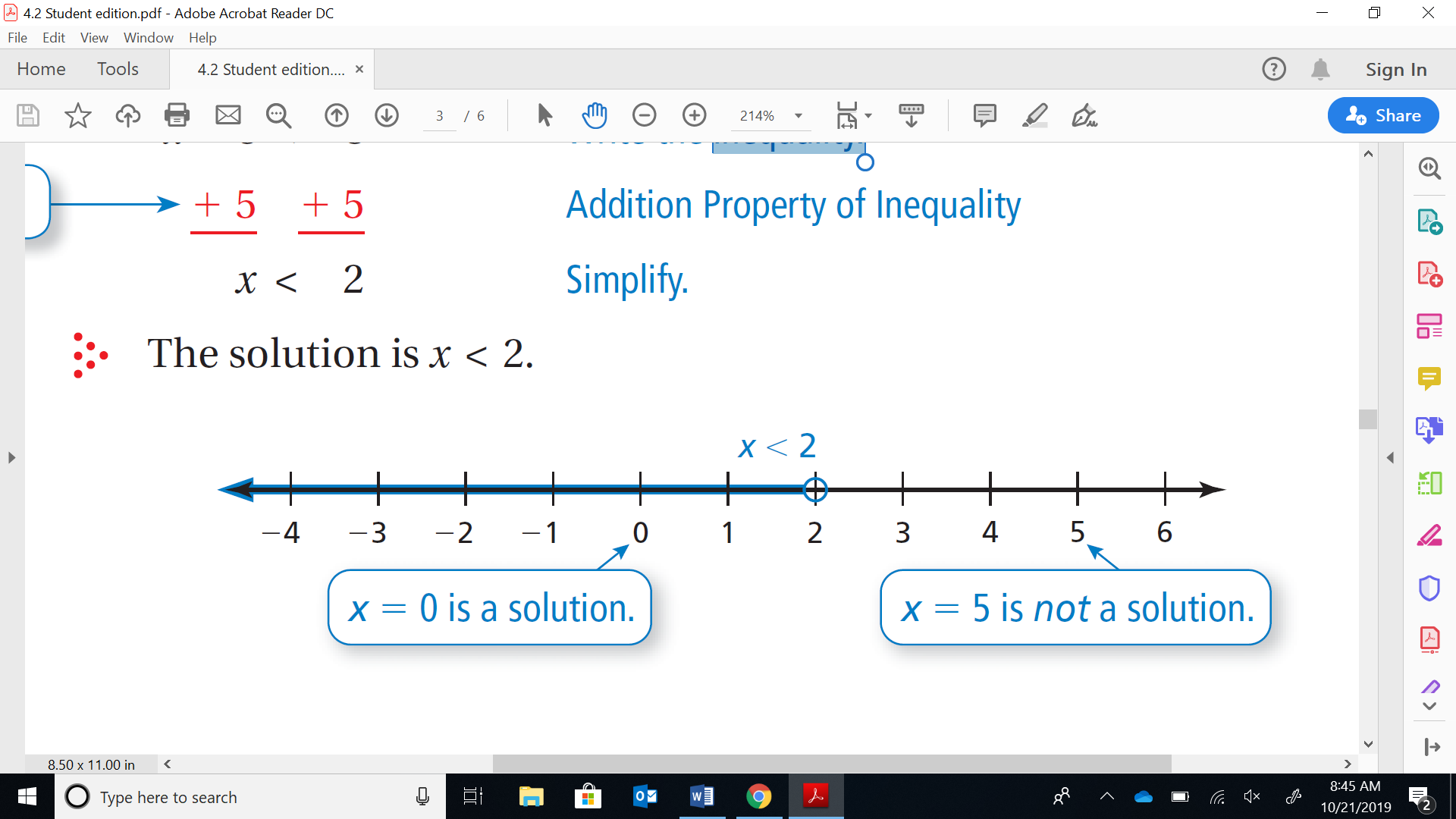
**Solving inequalities** is A LOT LIKE ***SOLVING EQUATIONS*** ... we do most of the same things, but we must also pay attention to the **direction of the inequality**.

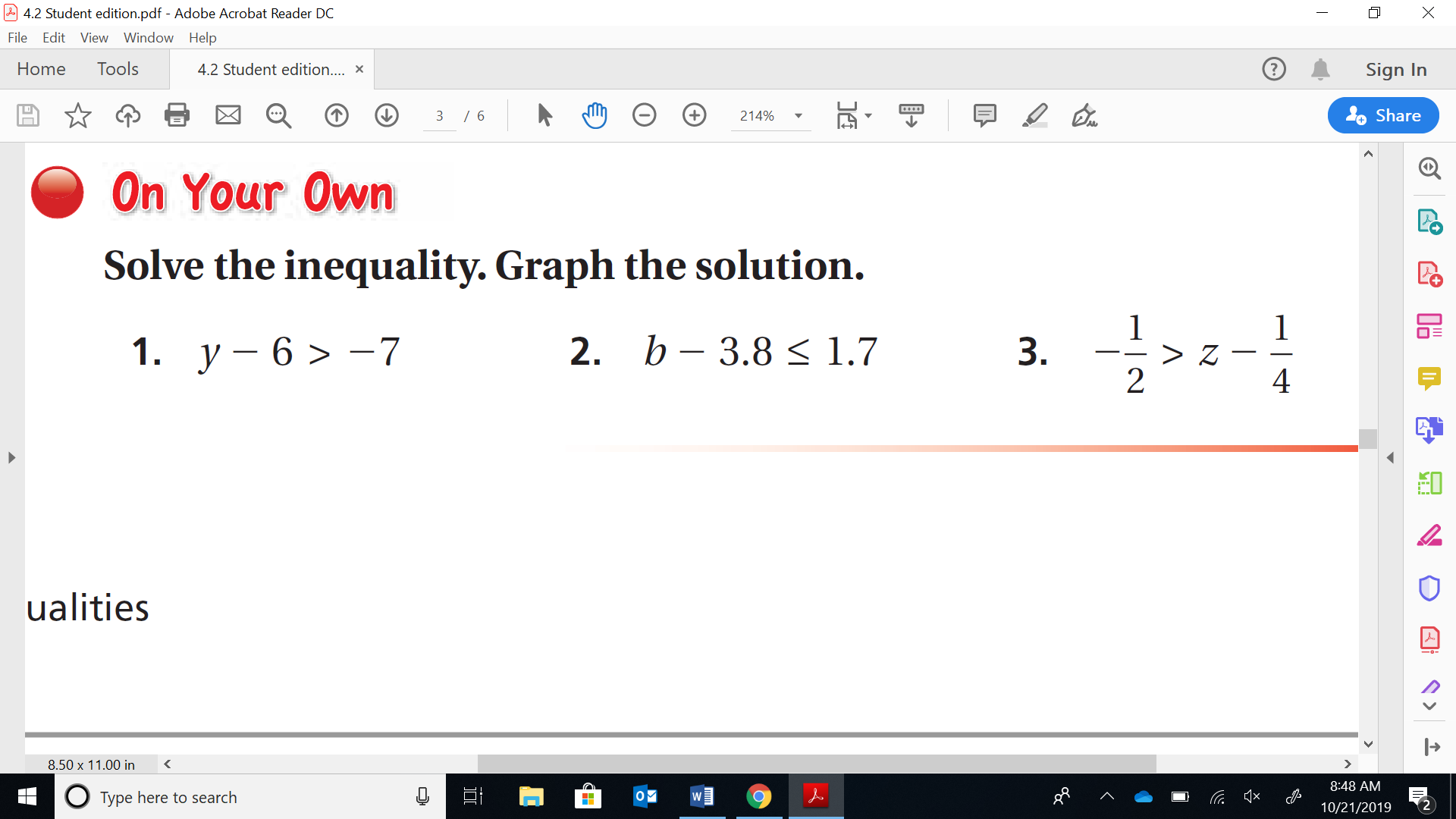






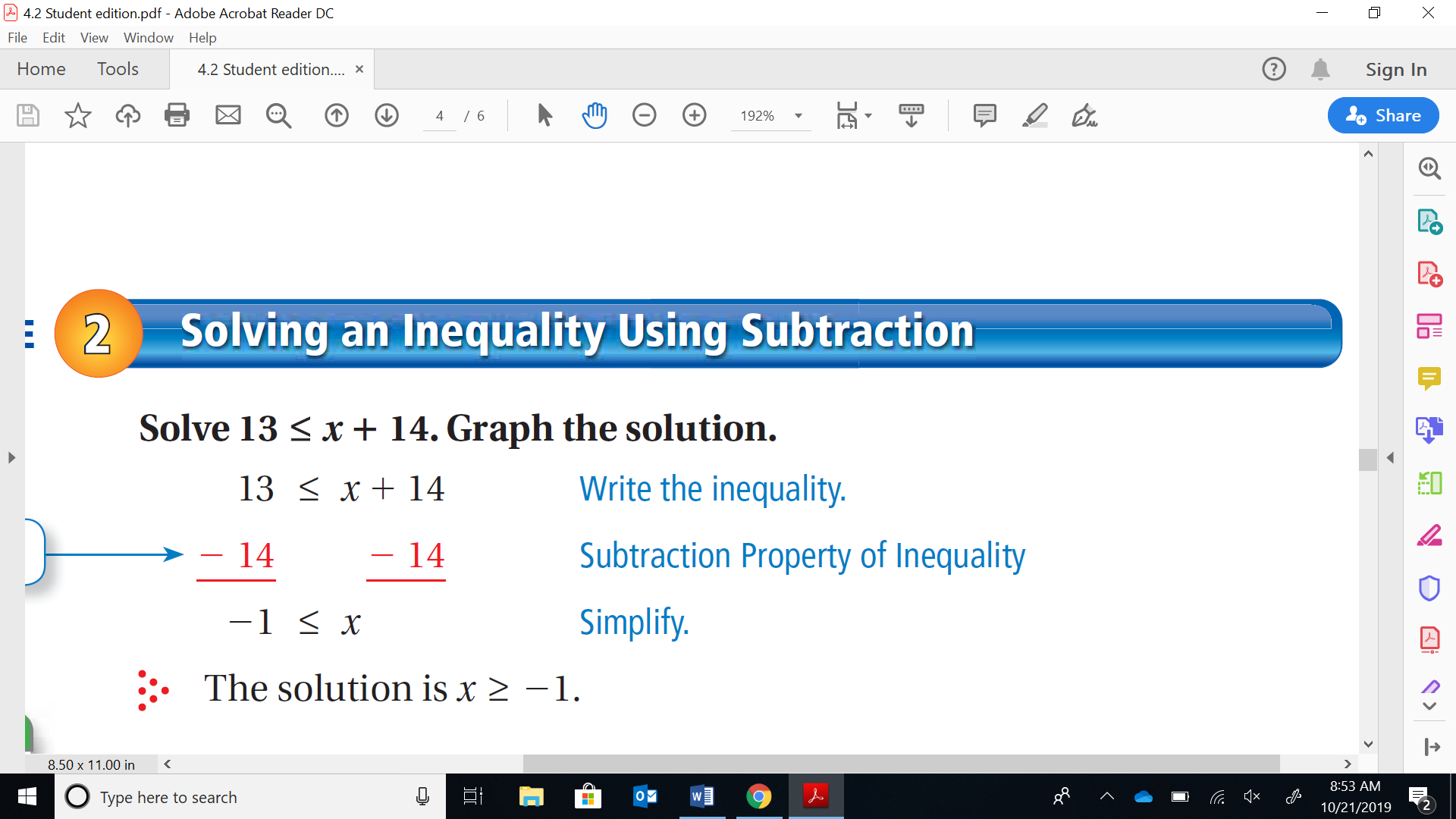
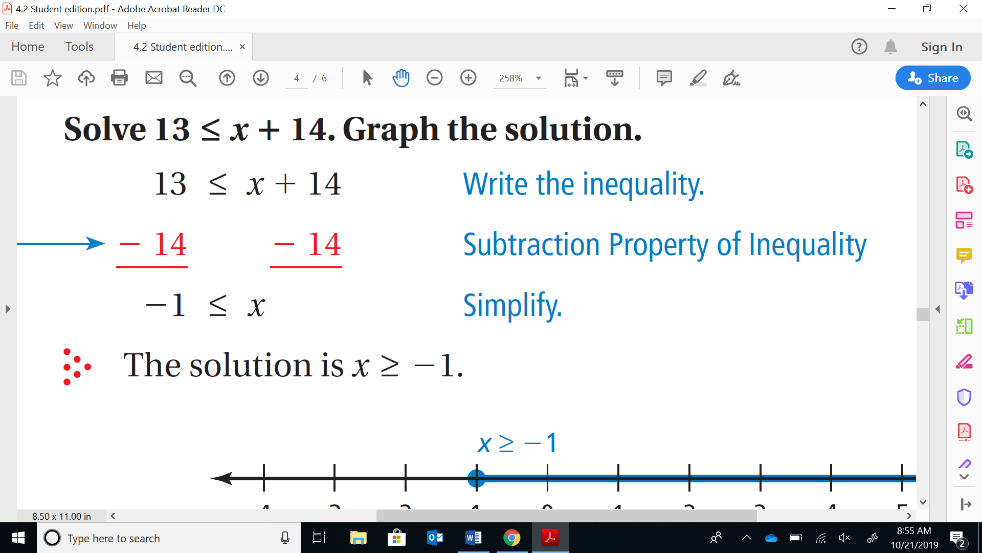


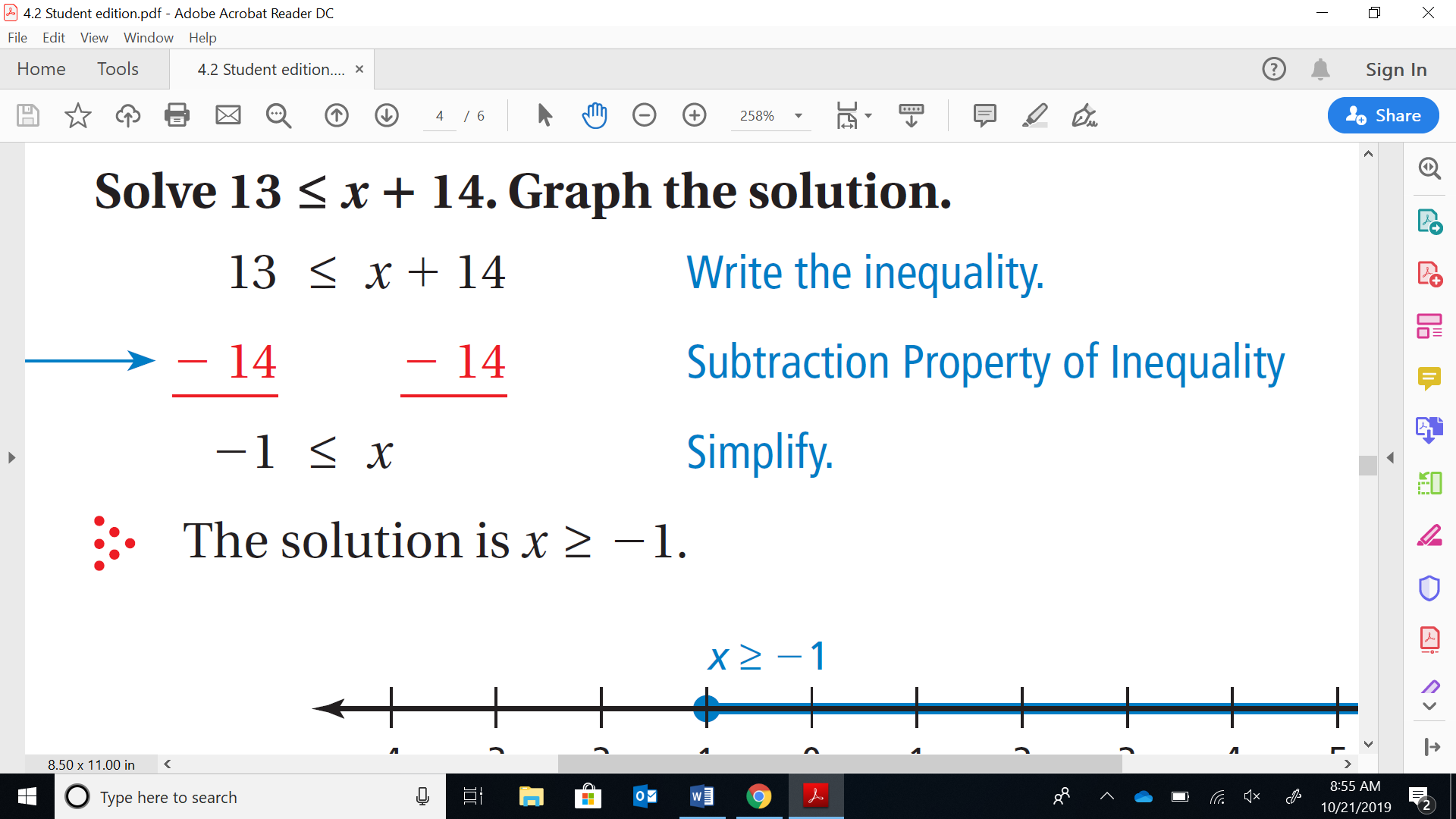


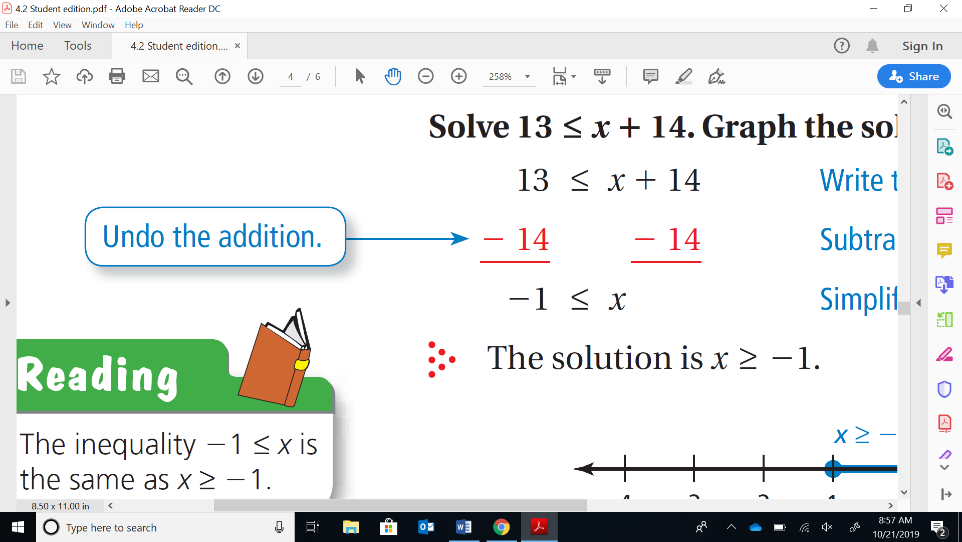


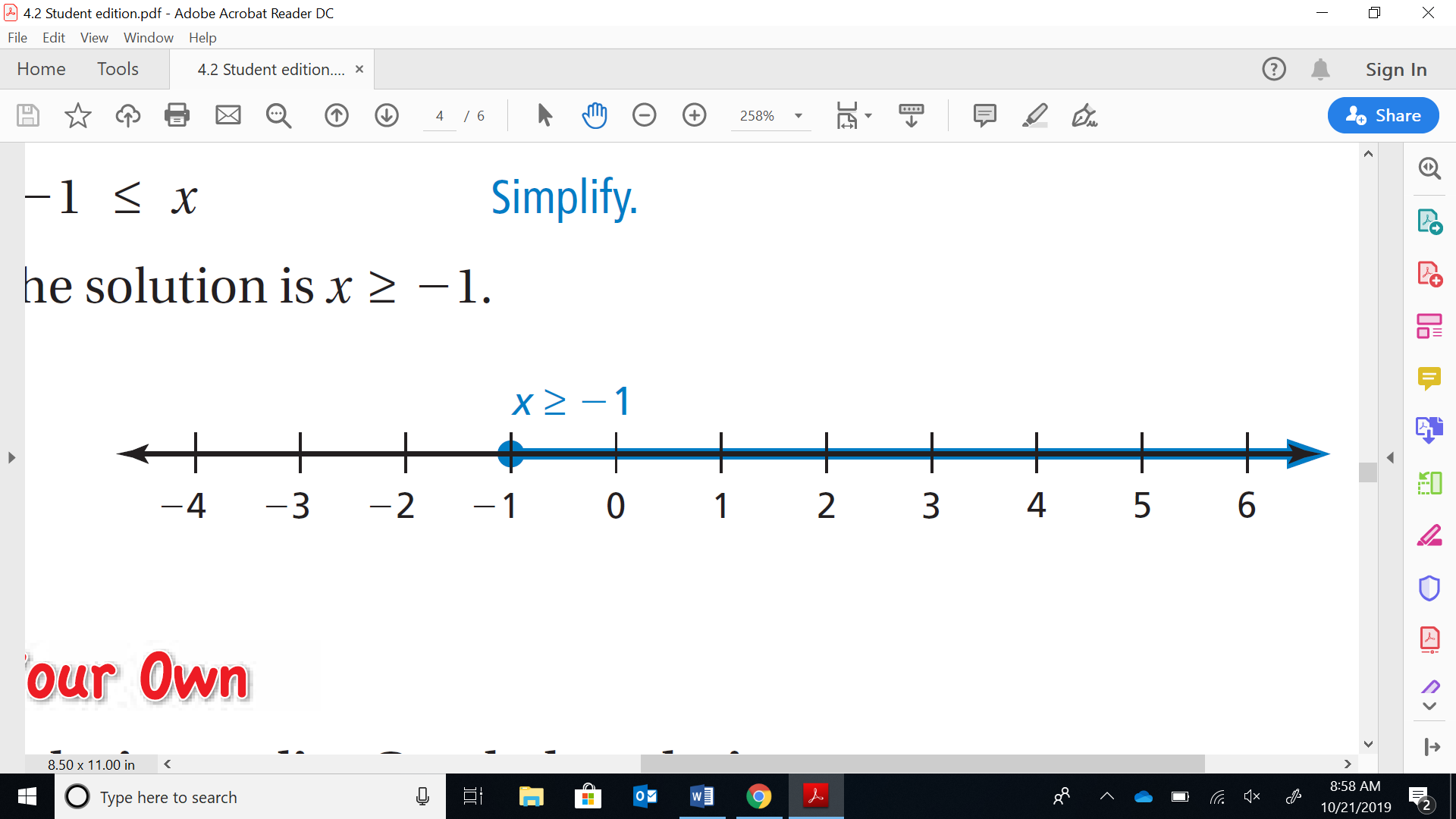
y>-1 b < 5.5 z < -

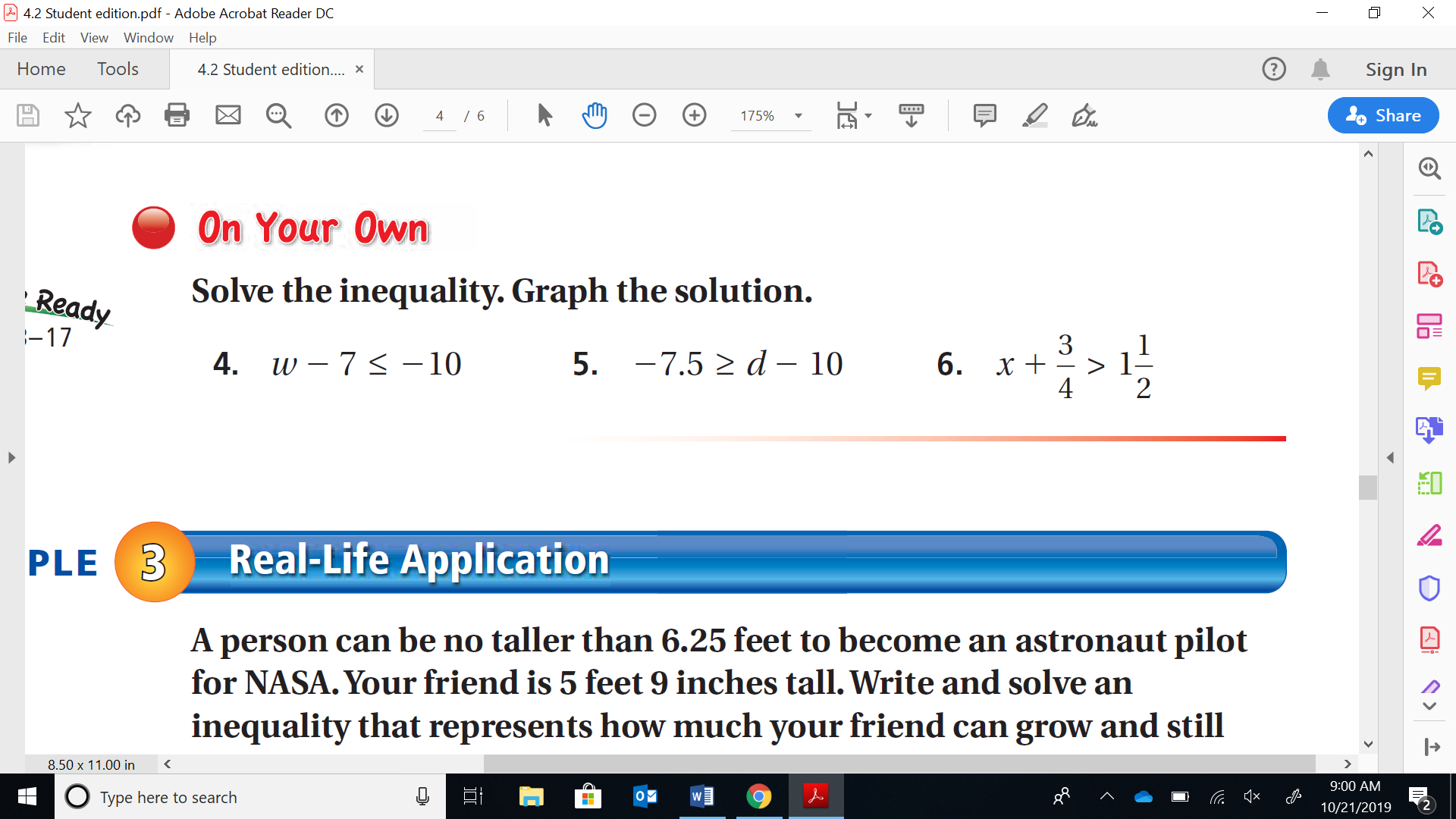














**4.2 Solving Inequalities using Addition & Subtraction**

***EQ:*** ***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

**Main Idea:** Solving inequalities is\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to solving

equations in that you have to **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**ALL by itself** on the **\_\_\_\_\_\_\_\_\_\_\_\_\_** of the inequality sign by

using **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

Ex: These are all SOLVED inequalities:

**REMEMBER:** The VARIABLE **SHOULD** be on the **LEFT SIDE** of the INEQUALITY so that it can be easily graphed!

**\***IF the variable is on the RIGHT when solved:

**SWITCH the VARIABLE with the NUMBER** AND **FLIP the INEQUALITY SIGN! EX:** 4 **>** D becomes

**Solving inequalities** is A LOT LIKE ***SOLVING EQUATIONS*** ... we do most of the same things, but we must also pay attention to the **direction of the inequality**.

