



## The Broken Calculator



Brandon and John found an old calculator. John tried the calculator and found that only the clear key and five other keys worked:

**2** **5** **+** **-** **=** **C**



“I have an idea,” said John. “Let’s see if we can use the keys that work to make all of the numbers from 1 to 50.”

1. Help John and Brandon. See if you can make all of the numbers from 1 to 50 on the calculator display using just these six keys. You may use each key more than once, or not at all. Make a list and explain what keystrokes you need to produce each number. Remember, you may use only the keys listed above—the others are broken.

Example:  $50 = 55 - 5$

2. When you have finished making your list, write a paragraph explaining all of the strategies that you used to find your solutions. Use the *Math Practices* page in the *Student Guide* Reference section to guide you.
3. Make 83 using these keys. Show your keystrokes. Explain your strategy.