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# Broken Calculators

## Pre-Activity

**Suppose your calculator is broken** so that only the 0 and the 1 and the + and the – keys work. How can you get your calculator to show the year in which you were born?

**1. Suppose the + key on your calculator is broken. Show a way to add that doesn't require that key.**

**2. When they fixed the + key on your calculator at the repair shop, they broke the  $\times$  key. Show a way to multiply that doesn't require that key.**

**3. As in the pre-activity, suppose your calculator is broken so that only the 0 and the 1 and the + and the – keys work. What is the smallest number of steps you need to get your calculator to show the year in which you were born?**