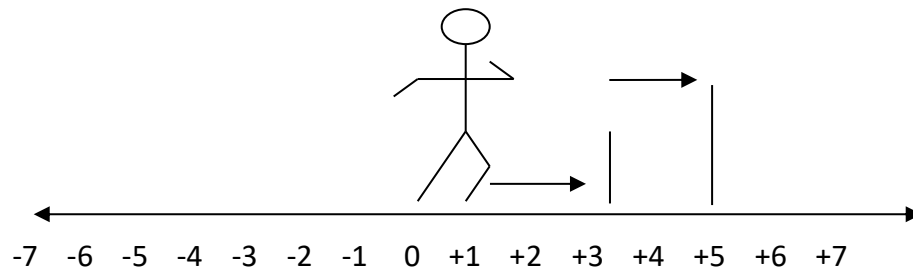


Addition – Signed Numbers

Model

One way of explaining integers is with a number line. Let's say I was standing on zero and I walked three spaces to the right, and then walked two more spaces to the right. Where would I be?



You've got it. You'd be 5 spaces to the right. Piece of cake, you're thinking.

Mathematical Notation

Let's agree that going to the right is positive, going to the left will be negative, and define walking mathematically as addition.

Example 1 So 3 spaces to the right could be labeled, 3R or +3
2 spaces to the right could be labeled, 2R or + 2.
Now we said we'd end up 5 spaces to the right, 5R, or +5.

Translating that problem of walking to the right, then walking further to the right mathematically, we have

$$\begin{aligned}3R + 2R &= 5R \\ (+3) + (+2) &= +5\end{aligned}$$

The sign of operation tells you to walk, the sign of value tells you which direction.