

Magnitude to 120 introduction

1 The same number sits in a different spot depending on the line's end

Show a number line marked only 0 and 100 at the ends. Ask where 50 should go.

"This line goes from zero to one hundred. Where do you think fifty belongs?"

Place 50 at the halfway point, reasoning that it is exactly between the two ends.

"Fifty is exactly halfway between zero and one hundred, so it sits right in the middle."

Show a second line marked 0 and 120 at the ends. Ask where 50 goes on this one.

"Now here is a line from zero to one hundred and twenty. Does fifty still belong in the middle?"

Show that 50 sits closer to the start on the longer line, since it is a smaller fraction of the whole distance.

"Fifty is less than half of one hundred and twenty, so it sits a bit before the middle on this line."

Compare the two lines side by side, same number, two different positions.

"Look at both lines together. The number fifty did not change — but where it sits did, because the lines are different lengths."

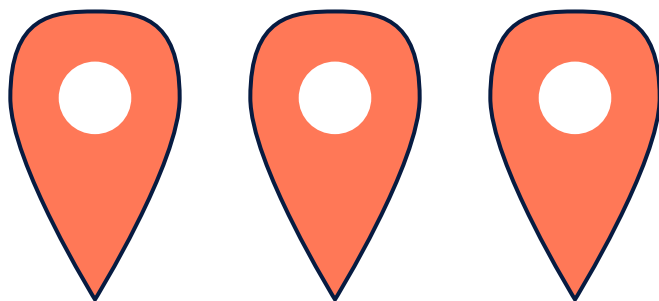
Show a common mistake: placing a number in the same spot on every line regardless of what the end value is. Check it: what are the two end numbers on this line?

"I put one hundred in the same place on both lines. But one line ends at one hundred and the other ends at one hundred and twenty — check the end numbers before placing anything."

End-labelled number lines – demonstration



Pointer cards — demonstration



Blank number line strip – demonstration



Tick and label cards — demonstration

