

## Modelling Inequalities Using Relational Rods

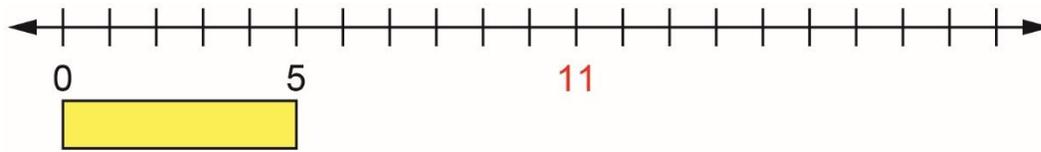
You can use relational rods to model and solve two-step inequalities involving whole numbers.

Here's an example for the inequality  $3r + 5 > 11$ .

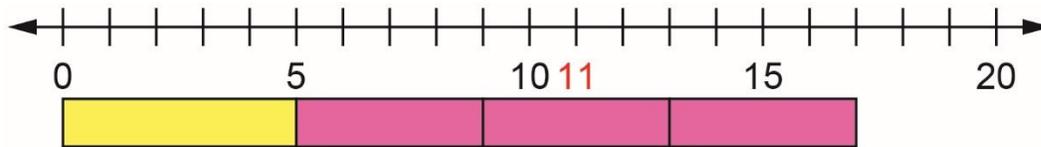
- There is a “+ 5” in the expression on the left.  
Start by placing a yellow 5 rod on a centimetre number line.  
You want to add 3 rods of the same colour and end up to the right of 11.

What colour rods can you use?

What is the smallest rod you can use?



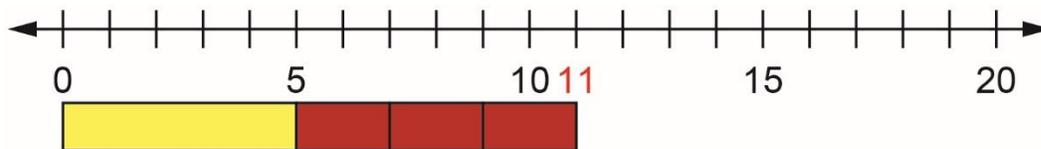
- The pink 4 rod works. You end up at 17.



- The light green 3 rod also works. You end up at 14.



- But the red 2 rod doesn't work. You end up at 11.



- The smallest rod that works is the light green rod.  
So, the solution is  $r > 2$ .