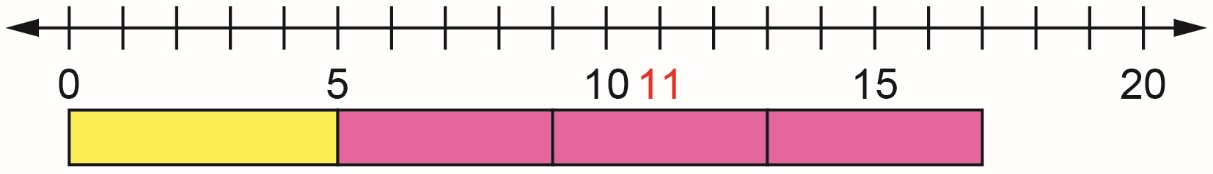
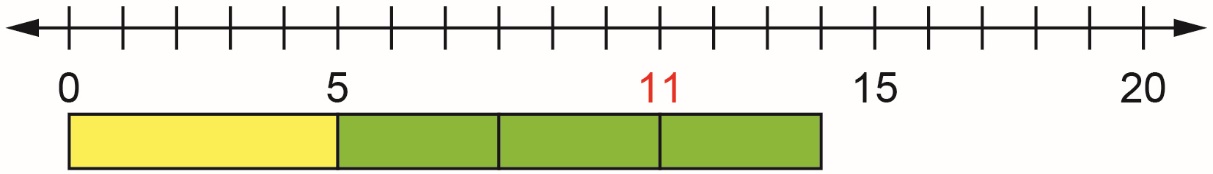
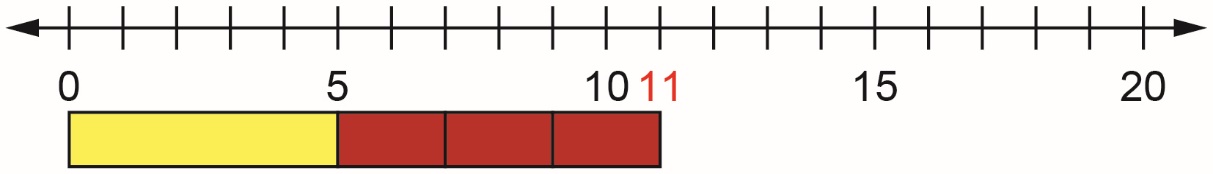
Modelling Inequalities  
 Using Relational Rods

**Algebra**

**Unit 2 Line Master 9**

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

Here’s an example for the inequality 3*r* + 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.