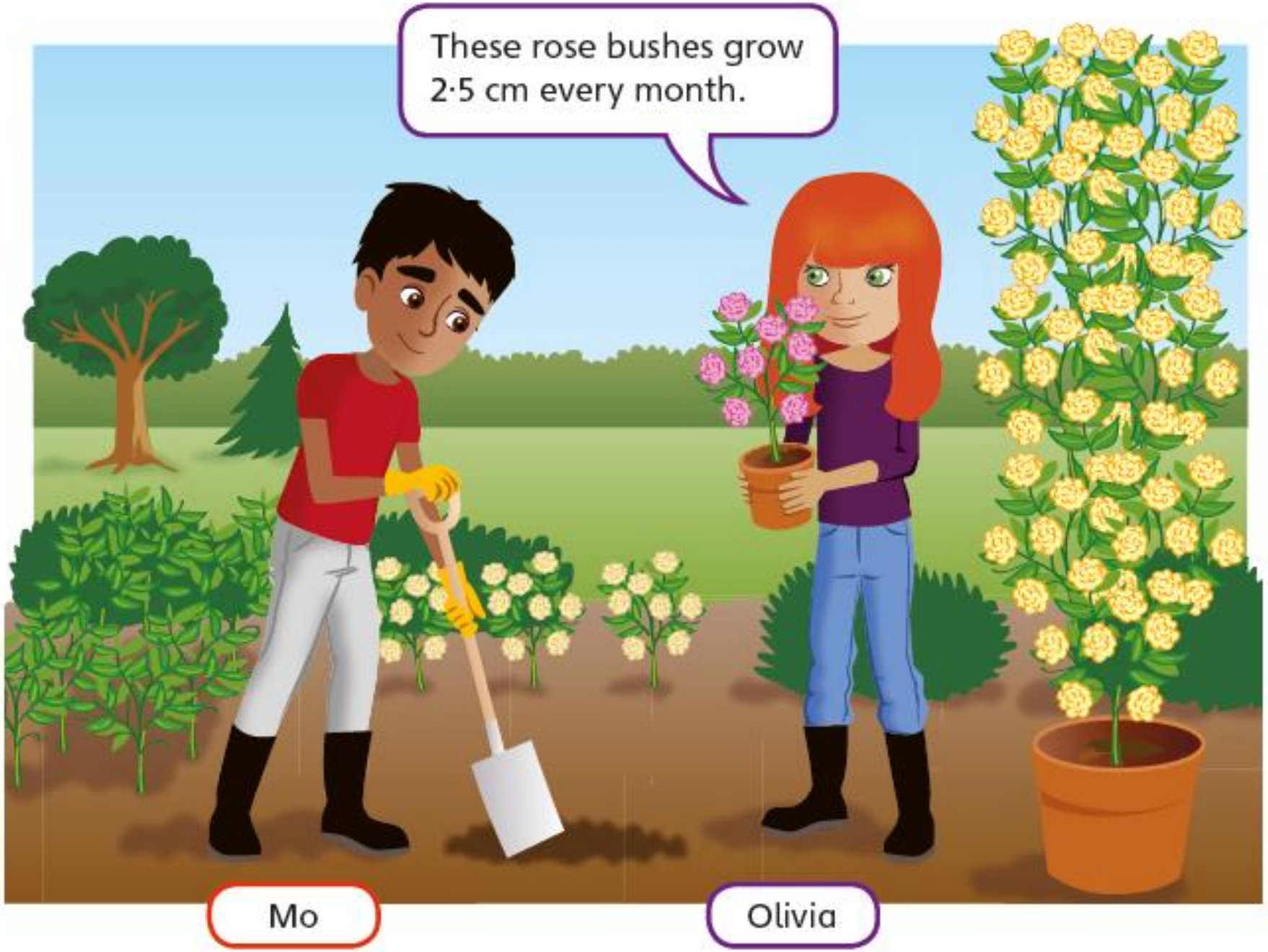


The rose bush Mo and Olivia are planting is 15.4 cm tall in April.

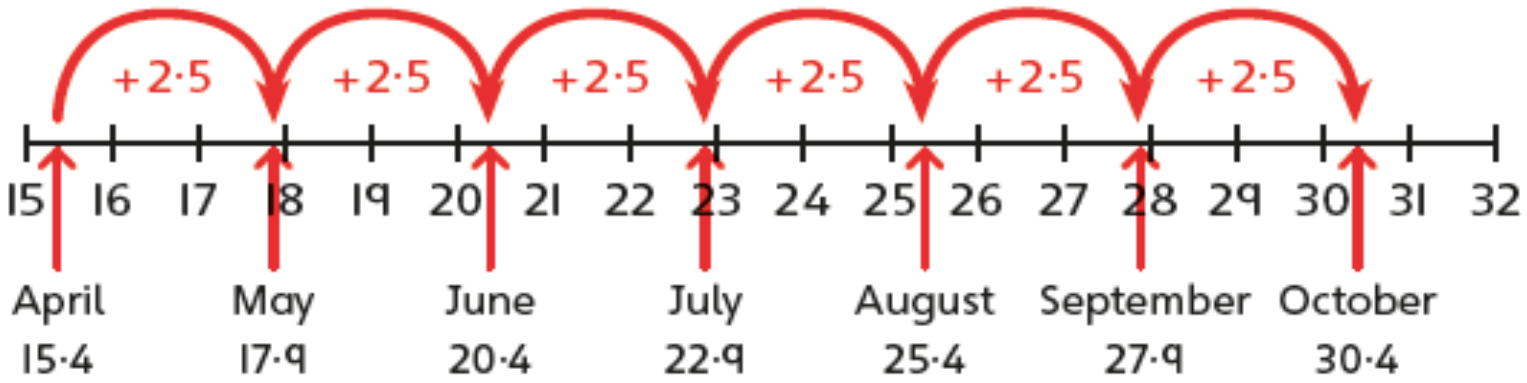
How tall will it be each coming month for the next 6 months?

Share

a) The rose bush starts at 15·4 cm and grows 2·5 cm each month. Add on 2·5 cm to its height from the previous month.

I made a table to organise the results. I also showed the same sequence on a number line.

Month	April	May	June	July	Aug	Sept	Oct
Height (cm)	15·4	17·9	20·4	22·9	25·4	27·9	30·4

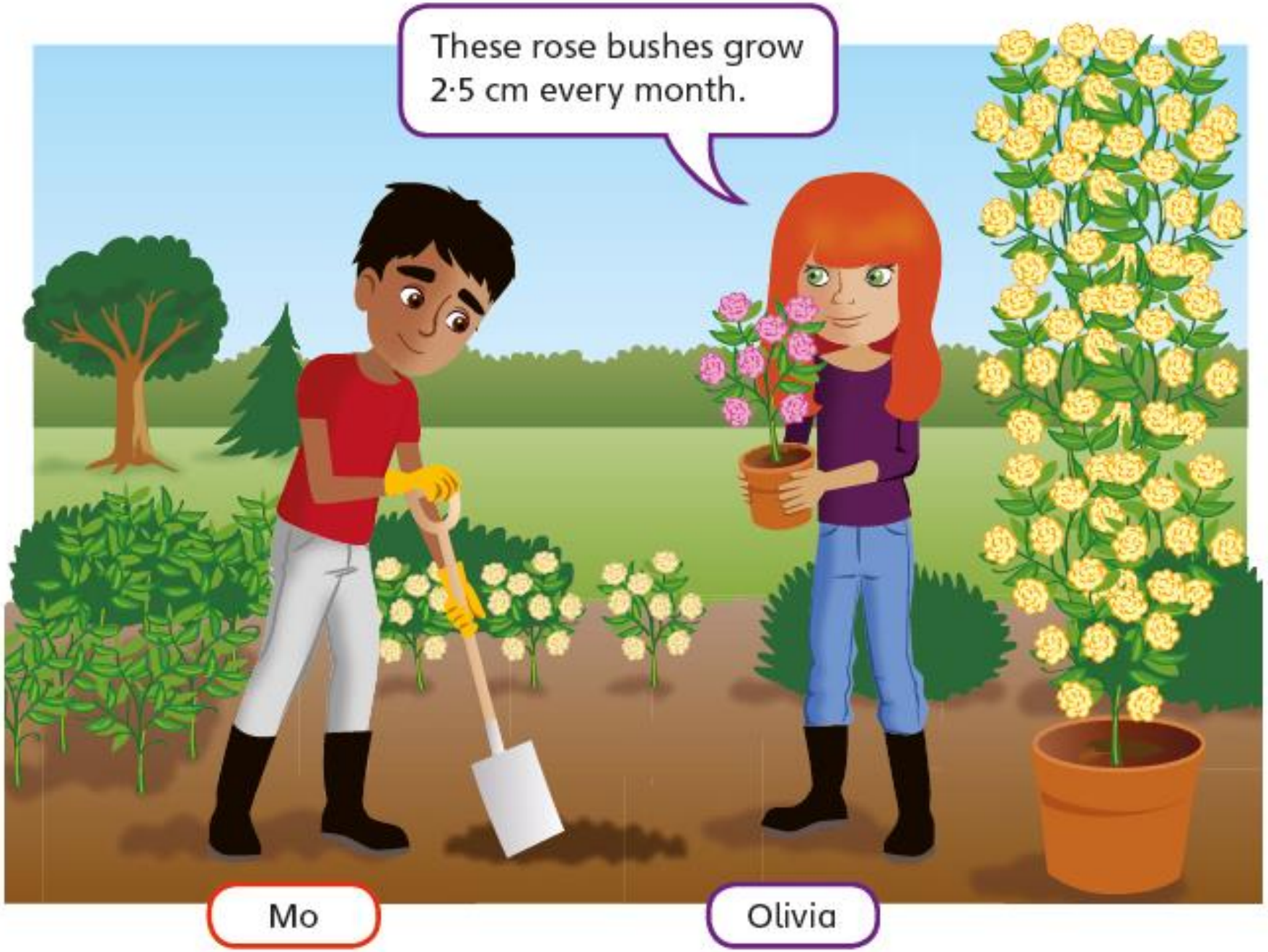


The rule is to add 2·5 each time.

These numbers are in a sequence. A sequence is when related things happen in an order. This sequence goes up by the same amount each time.

Remember to use a method for adding decimals if you are unsure.

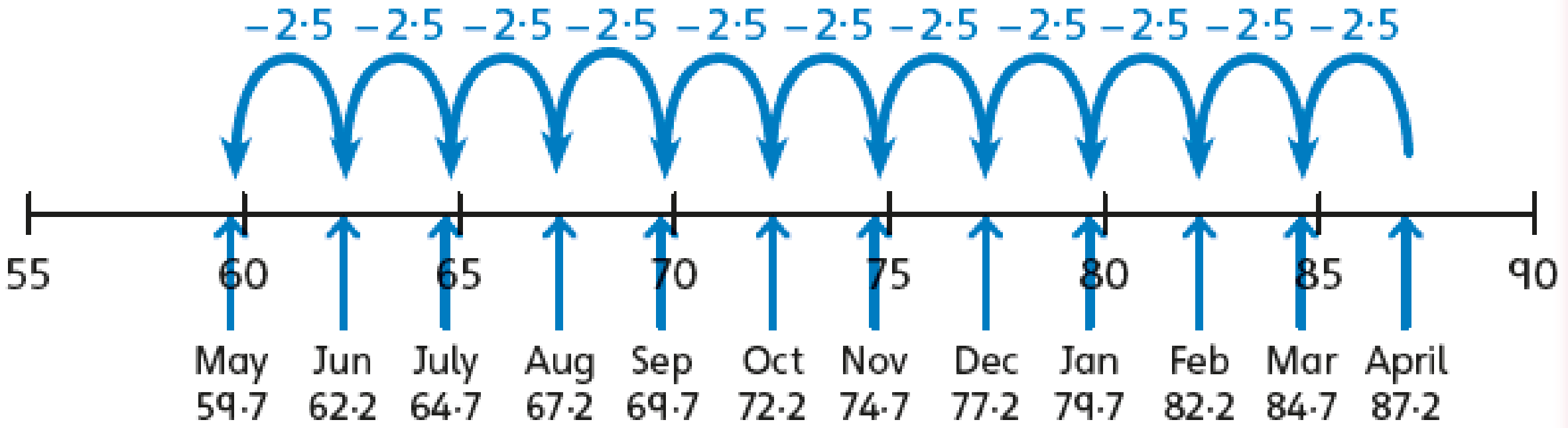
$$\begin{array}{r} 15.4 \\ +\ 2.5 \\ \hline 17.9 \end{array}$$



The other rose bush is 87.2 cm.

For how many months has the rose bush been over 60 cm tall?

b) Subtract 2·5 each time, until we get less than 60.



11 months ago, the rose bush was shorter than 60 cm. So, the rose bush has been over 60 cm tall for the last 10 months.

Think together

I wonder how to find the rule. Maybe I can look at how much each rose has grown by each month.

1 The heights of the roses each month make a sequence.

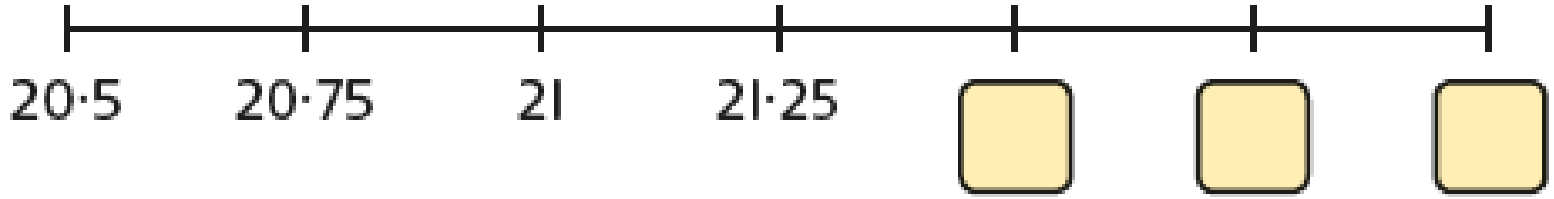
All the heights are in cm.

Find the rules and complete the missing numbers.

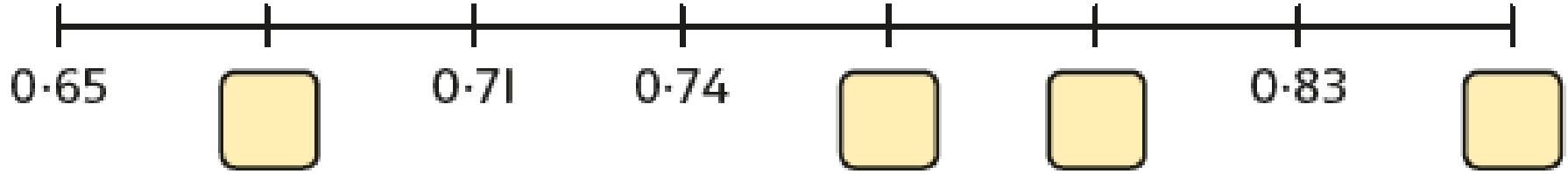
	April	May	June	July	Aug	Sept	Oct
White rose	15·1	15·2	15·3				
Climbing rose	10·0	12·6					
Wild rose		12·43	12·431	12·432			

2 Work out the sequences and complete the missing values.

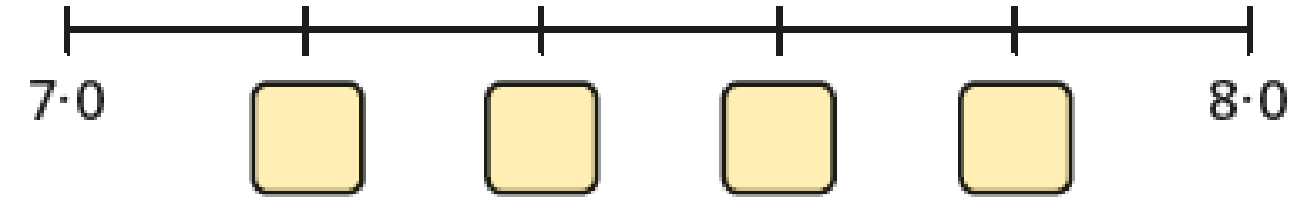
a)



b)



c)



Remember to find the difference between values to find out the way the sequence is increasing or decreasing.