Amaresh G S., Ballari, India.

## **Clock Puzzle Activity Sheet** Using the Geogebra applet, fill in the below table.

Time	Angle made by	Angle made by	<u>M</u>
	Hour hand H	Minute hand M	Н
	0°	0°	
11 10 10 2 9 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			
11 10 2 9 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			
11 10 10 10 10 10 10 10 10 10 10 10 10 1			
11 10 10 10 11 12 1 2 3 3 3 3 5 - - - - - - - - - - - - -			

 

 Write down the relationship between the angles made by the two hands of a clock (in terms of *H*
and *M*) in the below box.



Time	Angle made by Hour hand <i>H</i>	Angle made by Minute hand <i>M</i>	Relationship between the angles H and $M$ . 12H = M
11 10 2 9 3 5 5 4 7 6 5	X		12 <i>x</i> =

Both the hands of a clock are one over the other for the first time after 12 o'clock.

Find the angle *x*.

Calculate the number of minutes that have elapsed after 12 o'clock.

What will be the number of minutes that would have elapsed when both the hands of a clock are one over the other for the second time after 12 o'clock.

