

**A** Below is a sequence of numbers. Can you find the next two numbers in the sequence? Is this sequence linear?

35, 29, 23, 17, 11, \_\_\_\_\_, \_\_\_\_\_

**B** Below is a different sequence. Can you find the next two expressions in this sequence? Is this sequence linear?

1 ,  $3t$  ,  $9t^2$  ,  $27t^3$  ,

\_\_\_\_\_ , \_\_\_\_\_

 [www.achildsguideto.com](http://www.achildsguideto.com)

**C** What is the value of G when  $k=8$ ?

$$G = \frac{5k+16}{2k}$$

**D** Can you derive an expression for the total value of  $t$ ?

4	5	6	7	8	9	10	11
1	18	19	20	1	22	23	
2	30			3	34	35	
4	42	43		5	46	47	
5	54			8	59	60	
64	65	66	67	68	69	70	71

**JMC**

How many of the following are multiples of 11? 9 99 999 9999 99999