Question25322

How many two digit numbers are divisible by 7?

Solution. The smallest two digit number divisible by 7 is 14 and the greatest is 98. We obtain an arithmetic progression with $a_n = 98$, $a_1 = 14$ and $d = 7$. Now we use the formula

$$a_n = a_1 + d(n-1)$$
$$98 = 14 + 7(n-1)$$

Thus $n = 13$.

Answer. 13.