Problem of the Week Problem C Marbles, Marbles

A box contains 6 red marbles, 5 blue marbles, 2 yellow marbles, and 3 green marbles. Several orange marbles are added to the box. All the marbles in the box are identical except for colour.

A marble is then randomly selected from the box, and the probability that a blue or green marble is selected is $\frac{2}{7}$.

How many orange marbles were added to the box?

