some children of a primary school are standing in a circle. they are evenly spaced and the fourth child is standing directly opposite the seventh child. how many children are there altogether?

Solution

There are 3 spaces between 4-th and 7-th child.
Thus full circle contains 6 spaces.
To make circle with 6 spaces 6 children required, we just mark first child as seventh on the second round.
Answer: 6
Sketch: