



- MX** **8** A team of 11 students is to be chosen from a group of 18 students. **1**
SP Among the 18 students are 3 students who are left-handed.
What is the number of possible teams containing at least 1 student who is left-handed?
A. 19 448 B. 30 459 C. 31 824 D. 58 344
-

B

$$\text{Number of possible teams} = {}^{18}C_{11}$$

$$\text{Number of teams with no left-handed students} = {}^{15}C_{11}$$

$$\begin{aligned}\text{Number of teams with at least one left-handed students} &= {}^{18}C_{11} - {}^{15}C_{11} \\ &= 31\,824 - 1365 \\ &= 30\,459\end{aligned}$$

* These solutions have been provided by [projectmaths](http://projectmaths.com.au) and are not supplied or endorsed by NESA.

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