

Sailing club

Five boats sail out from a harbour.

- The fishing trawler sails out every **seven** days.
- The transporter sails out every **five** days.
- The yacht sails out every **three** days.
- The cruise boat sails out every **two** days.
- The ferry sails out **every** day.
- The boats all sail out from the harbour on the same day which is **day one**.



On what day will the five boats all sail out from the harbour together again? Use the notepad as a working out area.



Puzzle Pointer

Look for the common multiples of seven and five to start with.

Notepad



Answer

The five boats will all sail out from the harbour together again on day 211.

The boats all leave on day 1 so our multiples will always be plus 1.

The fishing trawler and transporter are the first boats to consider so we are looking for multiples of 7 that are also multiples of 5. This means we are looking for multiples of 35.

The next boat to match to multiples of 35 is the yacht, which is every 3 days. The first multiple of 35 that is also a multiple of 3 is 105.

The cruise boat leaves every 2 days. The first multiple of 105 that is also a multiple of 2 is 210.

As all the boats sailed together on day 1, add 1 day to 210 to find the answer **211**.