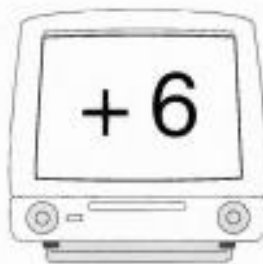


Function machines 2

Resource sheet 2b



Here are eight function machines.



There are different ways of using one, two or more function machines to change an input number of 12 into an output of 24.

For example:

$$12 \quad \begin{array}{|c|} \hline \times 2 \\ \hline \end{array} = 24$$

$$12 \quad \begin{array}{|c|} \hline \div 2 \\ \hline \end{array} \quad \begin{array}{|c|} \hline \times 4 \\ \hline \end{array} = 24$$

$$12 \quad \begin{array}{|c|} \hline \div 2 \\ \hline \end{array} \quad \begin{array}{|c|} \hline + 6 \\ \hline \end{array} \quad \begin{array}{|c|} \hline \times 2 \\ \hline \end{array} = 24$$

Task

Investigate how to make all the output numbers from 1 to 30 with an input of 12.

Challenge

Create a set of eight function cards you can use to make all the output numbers from 1 to 30 with an input of 7.

Write down why you chose your eight functions.