

Popcorn and juice

This task is about solving practical problems with patterns.

Questions/instructions

You and your friend are making popcorn for your class.
You need to work out how many spoons of corn you will need for 36 people. Each person should get a bowl of popcorn.

Spoons	Bowls made
1	2
3	6
5	10

- a) i) You see a pattern in the table, but your friend does not.
Tell your friend **how many bowls of popcorn can be made with six spoons of corn**.
Explain how you know this from the pattern in the table.

- ii) Think about the pattern.
How many spoons of corn will you need to make 36 bowls of popcorn?

- b) i) The chart below shows that one jug will hold four cups of juice and two jugs will hold eight cups of juice.
Continue the pattern in both rows of the chart until you find the number of jugs needed to hold 46 cups of juice.

Jugs	1	2	3	4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Juice	4	8	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

- ii) How many jugs will you need for 46 cups of juice?
- iii) Explain how you got your answer