

The Water Puzzle



You have a 3 and a 5 litre water container, each container has no markings except for that which gives you its total volume. You also have a running tap. You must use the containers and the tap in such away as to exactly measure out 4 litres of water. How is this done?

You might remember this puzzle from Die Hard with a vengeance where Bruce Willis and Samuel L. Jackson have to diffuse a bomb by placing 4 gallons of water on a set of scales...

There are two ways to solve this, maybe the question could be modified to say the 5 litre can doesn't fit under the tap...

Number 1

Fill the 5 litre can from the tap

Empty the 5 litre can into the 3 litre can - leaving 2 litres in the 5 litre can.

Pour away the contents of the 3 litre can

Fill the 3 litre can with the 2 litres from the 5 litre can - leaving 2 litres in the 3 litre can.

Fill the 5 litre can from the tap.

Fill the remaining 1 litre space in the 3 litre can from the 5 litre can.

Leaving 4 litres in the 5 litre can.

Number 2

Fill the 3 litre can from the tap.

Empty the contents of the 3 litre can into the 5 litre can.

Fill the 3 litre can from the tap.

Empty the contents of the 3 litre can into the 5 litre can. - Leaving the 5 litre can full and 1 litre in the 3 litre can.

Poor away the contents of the 5 litre can

Poor the 1 litre from the 3 litre can into the 5 litre can.

Fill the 3 litre can from the tap.

Empty the contents of the 3 litre can into the 5 litre can.

Leaving 4 litres in the 5 litre can.