

Problem

Liza has a fixed paddling pool in her back garden.

The paddling pool has an internal rectangular base that measures 1.2 m by 1 m and has an internal height of 0.4 m.

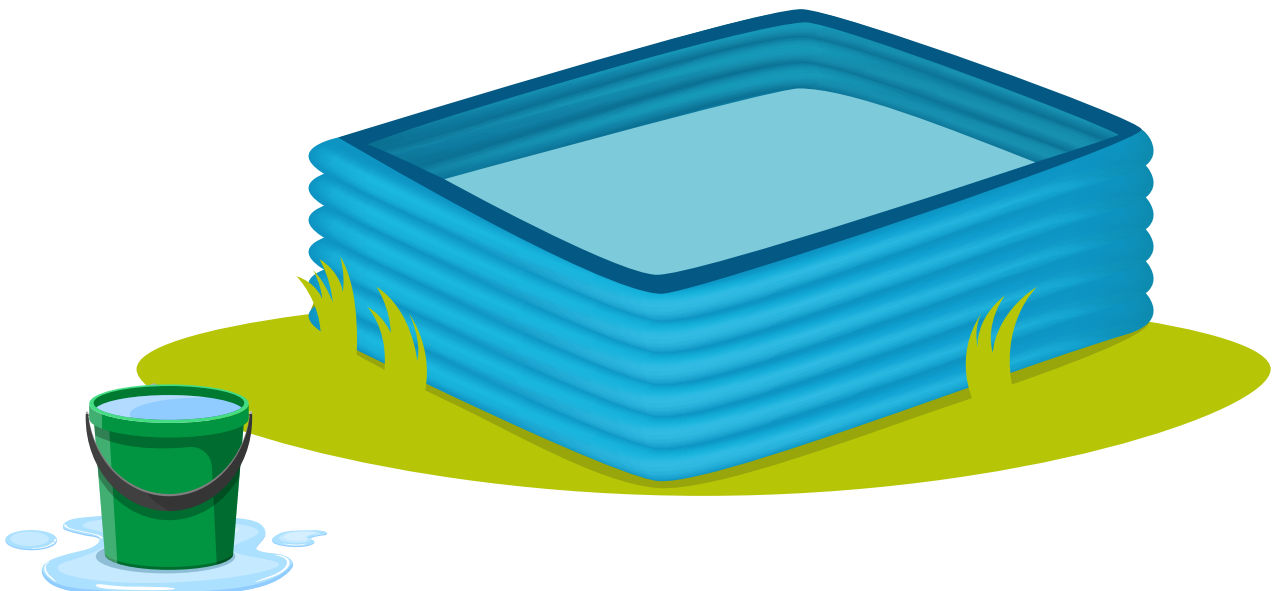
Liza does not have a garden hose and needs to use a 12 litre bucket to fill the paddling pool.

She can fill the bucket full using an outdoor water tap before emptying the bucket of water into the paddling pool.

Unfortunately, there is a hole at the bottom of the bucket and it leaks water at a rate of 150 ml every second.

It will also take Liza 10 seconds to carry a full bucket from the tap to the paddling pool and she must always fill the bucket full.

Liza wants the paddling pool to be at least three-quarters full.



Images © gettyimages.co.uk



What is the *least* number of times Liza will need to fill the bucket?

