



Capacity Challenges

Challenge 1

Janine needs to fill a bucket with 2 litres (2000ml) of water. She has bottles which hold the following amounts:

200ml, 250ml, 500ml, 750ml

Give two different ways that Janine can fill the bucket (you may use each container more than once).



Capacity Challenges

Challenge 2

Lucien needs to fill a bucket with 1 litre 500ml (1500ml). He has containers which hold the following amounts:

100ml, 200ml, 250ml, 300ml.

Give two different ways that Lucien can fill the bucket (you may use each container more than once).



Capacity Challenges

Challenge 3

Siobhan needs to fill a bucket with 2 litres 500ml (2500ml). She has containers which hold the following amounts:

250ml, 300ml, 500ml, 750ml

Give two different ways that Siobhan can fill the bucket (you may use each container more than once).



Capacity Challenges Answers

All problems have a variety of possible answers, here are some examples:

Challenge 1: (2000ml)

- $200\text{ml} + 200\text{ml} + 200\text{ml}$
- $250\text{ml} + 250\text{ml} + 250\text{ml} + 250\text{ml} + 250\text{ml} + 250\text{ml} + 250\text{ml} + 250\text{ml}$
- $500\text{ml} + 500\text{ml} + 500\text{ml} + 500\text{ml}$
- $750\text{ml} + 750\text{ml} + 500\text{ml}$
- $500\text{ml} + 500\text{ml} + 200\text{ml} + 200\text{ml} + 200\text{ml} + 200\text{ml} + 200\text{ml}$

Challenge 2: (1500ml)

- $100\text{ml} + 100\text{ml} + 100\text{ml}$
- $200\text{ml} + 200\text{ml} + 200\text{ml} + 200\text{ml} + 200\text{ml} + 250\text{ml} + 250\text{ml}$
- $250\text{ml} + 250\text{ml} + 250\text{ml} + 250\text{ml} + 250\text{ml} + 250\text{ml}$
- $300\text{ml} + 300\text{ml} + 300\text{ml} + 300\text{ml} + 300\text{ml}$
- $300\text{ml} + 300\text{ml} + 300\text{ml} + 200\text{ml} + 200\text{ml} + 200\text{ml}$

Challenge 3: (2500ml)

- $250\text{ml} + 250\text{ml} + 250\text{ml}$
- $500\text{ml} + 500\text{ml} + 500\text{ml} + 500\text{ml} + 500\text{ml}$
- $750\text{ml} + 750\text{ml} + 750\text{ml} + 250\text{ml}$
- $750\text{ml} + 750\text{ml} + 250\text{ml} + 250\text{ml} + 500\text{ml}$