

NUMERACY CHALLENGE



LEVEL 1

LEVEL 2

ACCESS MATHS

NUMERACY CHALLENGE

I have ten boxes which I want to pack into crates. Each crate can carry a maximum of 25kg. The trouble is, I only have 3 crates, and the total weight of the boxes is 75kg.

**15kg, 13kg, 11kg, 10kg, 9kg,
8kg, 4kg, 2kg, 2kg, 1kg**

How can I pack the boxes into the crates?



NUMERACY CHALLENGE

You have a full bucket containing 24 liters of water.

You also have three empty buckets:

One is 5 liters

One is 11 liters

One is 13 liters

How could you divide the 24 liters of liquid into three equal parts, so that you have three buckets containing 8 liters each? You can only use the buckets!
See how many 8 liter buckets can you make?

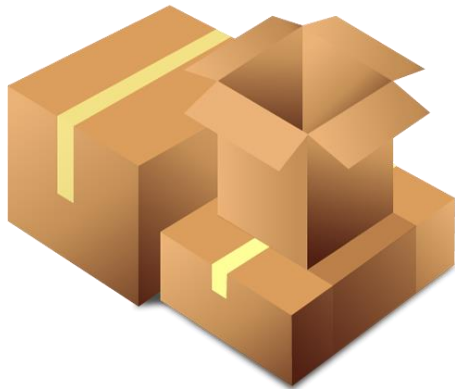


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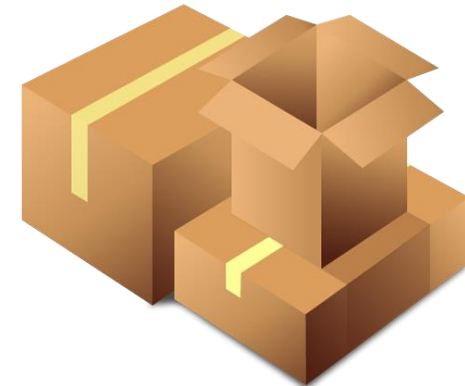


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LEVEL 1

Answer:

Some possible solutions:

{15,10} {13,8,4} {11,9,2,2,1}

{11,10,4} {15,8,2} {13,9,2,1}

LEVEL 2

Answer:

Move	24 liter bucket	13 liter bucket	11 liter bucket	5 liter bucket
Start	24	0	0	0
24 => 13 liter bucket	11	13	0	0
13 => 5 liter bucket	11	8	0	5
13 => 11 liter bucket	11	0	8	5
5 => 13 liter bucket	11	5	8	0
24 => 13 liter bucket	3	13	8	0
13 => 5 liter bucket	3	8	8	5
5 => 24 liter bucket	8	8	8	0