

Maths Circle India: Module 8, Session 3
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3 Measurement of Milk

Suppose there is unlimited supply of milk and a huge empty container with unlimited capacity.

If you have two buckets of capacities 7 litres and 3 litres, respectively, then can you measure and give a customer exactly 5 litres of milk?

Find all positive integers m such that you can measure and give exactly m litres of milk.

Think: In general, if you have two buckets of capacities a litres and b litres, respectively (with a and b positive integers), then what is the answer to the second question above?