

**01**

Mary cut a few pieces of string of length 5 cm each from a bundle. Later, she decided to cut the same number of pieces, but of length 4 cm each from the remaining string in the bundle. Altogether, she had cut 54 cm of the string. How many pieces of the string did she cut altogether ?

5 cm strings		4 cm strings		Both types
Number	Total length	Number	Total length	Total length
1	$5(1 \times 5)$	1	$4(1 \times 4)$	$5 + 4 = 9$ cm
2	$10(2 \times 5)$	2	$8(2 \times 4)$	$10 + 8 = 18$ cm
3	$15(3 \times 5)$	3	$12(3 \times 4)$	$15 + 12 = 27$ cm
4	$20(4 \times 5)$	4	$16(4 \times 4)$	$20 + 16 = 36$ cm
5	$25(5 \times 5)$	5	$20(5 \times 4)$	$25 + 20 = 45$ cm
6	$30(6 \times 5)$	6	$24(6 \times 4)$	$30 + 24 = 54$ cm

Your solution here:

**02**

Rod A is  $\frac{1}{3}$  as long as rod B. Rod C is  $\frac{1}{2}$  as long as rod B. Rod

A is 20 cm long. Find the length of rod C. (Recall that  $\frac{1}{3}$  is 1

out of 3 equal parts and  $\frac{1}{2}$  is 1 out of 2 equal parts.

- (A) 20 cm      (B) 30 cm      (C) 60 cm      (D) 10 cm

Your solution here:

**03**

Mrs. Taruni had 2025 cm of cloth. She made 2 identical dresses using 420 cm of cloth for each dress.

- (A) How much cloth was left after she made the 2 dresses ? Give your answer in metres and centimetres.
- (B) At least how much more cloth must she buy in order to make 3 more dresses of the same type ? Give your answer in centimetres.

Your solution here:

**04**

Kajal had four pieces of each type of the following weights.



She can use these weights to weigh items on a weighing scale. Kajal wants to measure exactly 1 kg 400g of flour, using at least one piece of each type of the weights shown above. How many ways can she do this ?

Your solution here:

**05** The volume of water in container P is 3 times the volume of water in container Q. Containers P and Q together have 12 l of water. Container R has 1350 ml less water than container P.

- (A) Find the volume of water in container P in millilitres.
- (B) What is the capacity of container R if 1400 ml more water is required to fill it completely ?

Your solution here: