

Holi maths for CBSE Class 9 and 10

CBSE Math Revision · CBSE Class 9 and 10 · Student sheet

Name _____

Class _____

Date _____

No calculator. Every answer works out exactly.

Starter (5 minutes)

1. Write the ratio 12 : 18 in its simplest form.
2. Share 450 g of colour powder in the ratio 2 : 3.
3. Find 25% of 360.
4. 3 packets of colour make 12 cups of paint. How many packets are needed for 20 cups?

Main activity (35 minutes)

Task A: Colour recipes

Pink powder is made by mixing red and white in the ratio 1 : 3. Orange powder is made by mixing red and yellow in the ratio 2 : 3.

- a. How much red and how much white are in 200 g of pink?
- b. How much red is needed for 250 g of orange?
- c. You make 200 g of pink and 250 g of orange. How much red do you use altogether? What percentage of the 450 g is red?

Task B: Mixing two mixtures

Mix A is red and yellow in the ratio 1 : 4. Mix B is red and yellow in the ratio 3 : 2.

- a. What fraction of each mix is red?
- b. How much of each mix is needed to make 500 g with red and yellow in the ratio 1 : 1?
- c. 300 g of A is mixed with 200 g of B. What percentage of the mixture is red?

Task C: Water balloons

A water tank is a cuboid 50 cm long, 40 cm wide and 30 cm high.

- a. Find the volume of the tank in litres. (1 litre = 1000 cm^3 .)
- b. Each balloon holds 250 ml. How many balloons can be filled from a full tank?
- c. A bag has 6 green, 4 pink and 10 yellow packets of colour. One packet is taken at random. Find the probability that it is not yellow.

Extension

1. How much red must be added to 400 g of pink (red : white = 1 : 3) to make the ratio red : white = 1 : 1?
2. Red and blue powder are in the ratio 2 : 5. After 30 g of red is added the ratio is 1 : 1. How much of each was there at first?