



CLASS-8/WORKSHEET/DIRECT AND INVERSE PROPORTION

CASE STUDY 1

The students of Anju's class sold posters to raise money. Anju wanted to create a ratio for finding the amount of money her class would make for different numbers of posters sold. She knew they could raise Rs 250 for every 60 posters sold.

- (a) How much money would Anju's class make for selling 102 posters?
- (b) Could Anju's class raise exactly Rs 2,000? If so, how many posters would they need to sell? If not, why?
- (c) Suppose her classmates sell 40 posters for Rs. 400, how much money would they make for selling 25 posters?



CASE STUDY 2

Many schools have a recommended students-teacher ratio as 35:1. Next year, the school expects an increase in enrolment by 280 students.

- (i) How many new teachers will they have to appoint to maintain the students-teacher ratio?
- (ii) Board members of school XYZ decided to keep the ratio as 30:1. Total how many teachers will be appointed if the strength of the school is 1800?
- (iii) A school has 15 teachers working. How many more teachers will be needed if the total strength of school is 735 and they want to maintain a ratio of 35:1?

CASE STUDY 3

Jagmeet has a road map with a scale of 1 cm = 20 km.

- (i) He drives on a road for 72 km. What would be his distance covered in the map?
- (ii) Suppose the distance between two places on the map is 3.5 cm, find the exact distance between the two places.
- (iii) Jagmeet went from place a to b to meet his parents and then b to c to join his office. If the distance between a and b is 4 cm and the distance between b and c is 2 cm on the map, total how much distance is covered by Jagmeet.

