



## Ratio (3): Changing Ratios

[09-09-27C-K6]

**Do these sums. Show all your working carefully.**

- (1) The ratio of the number of Shuzhen's books to Limei's is 3 : 4. Limei has 60 books. If Limei gives 30 books to Shuzhen, what will the new ratio of the number of Shuzhen's books to Limei's be?
- (2) Ahmad and Devi had an equal amount of money each. After Ahmad earned \$15 more and Devi earned \$10 more, the ratio of Ahmad's money to Devi's money became 8 : 7. How much money did each boy have at first?

(3) In a 'use-your-hands' campaign,  $\frac{1}{5}$  of a class originally had to clean the tables and chairs. However, 2 more students in the class were added to the job later, causing the ratio of the number of participating students to that of non-participating students in the class to be 1 : 3. How many students were there in the class?

(4) The ratio of the number of sweets in Tin A to that in Tin B was 8 : 5. After  $\frac{1}{4}$  of the sweets in Tin A were sold, there were 120 more sweets in Tin A than Tin B. How many sweets were there in Tin B?

(5) Some workers are digging a drain. The ratio of the length that has already been dug to that which has not been dug is 3 : 4. After another 20 m of the drain has been dug, this ratio becomes 4 : 3. What is the total length of the drain to be dug?

(6) The ratio of the number of people in Team A to that in Team B is 7 : 3. If 30 people from Team A join Team B, the ratio of the number of people in Team A to that in Team B will become 3 : 2. How many people are there in each team?

# ANSWERS

## Exercise 7

- (1) 5 : 2 (2) \$25 (3) 40 (4) 600  
(5) 140 m (6) Team A: 210, Team B: 90