

10. (a) A sum of \$24 000 is to be divided into three shares in the ratio of 3 : 5 : 7. Find the largest share.  
 (b) The lengths of the sides of a triangle are in the ratio of 4 : 5 : 6. If the perimeter is 45 cm, find the sides.

11. Mr Chen earns \$2 500 and spends \$1 750 a month. Find the ratio of  
 (a) his income to his expenditure,  
 (b) his savings to his income,  
 (c) his savings to his expenditure.

12. (a) If  $A : B = 3 : 4$  and  $B : C = 2 : 3$ , find  $A : B : C$ .  
 (b) If  $X : Y = 5 : 4$  and  $Y : Z = 6 : 1$ , find  $X : Y : Z$ .

13. If the price of petrol is increased from \$1.20 to \$1.50 per litre, find the ratio in which the price increases.

14. The price of a book is increased in the ratio 6 : 5. Find the new price if the old price was \$15.

15. In a sale, the prices of all stationery articles were reduced in the ratio 4 : 5. Find the sale price of

- (a) a pen whose original price was \$25.  
 (b) a pencil box whose original price was \$1.50,  
 (c) a clipboard whose original price was \$3.75.

16. A picture measuring 8.5 cm by 5.5 cm is enlarged in the ratio 7 : 5. Find the dimensions of the new picture.

17. When the price of 1 l of petrol is reduced from \$1.50 to \$1.20, Mr Rajan increased his monthly petrol consumption from 200 l to 300 l. In what ratio does his petrol bill increase or decrease?

18. A school's computer club has 250 boys and 175 girls. If the number of girls is decreased in the ratio 4 : 5 while the number of boys is increased in the ratio 6 : 5, what is the new ratio of boys to girls?

19. David's expenditure in April has decreased in the ratio 4 : 5 and as a result he saves \$120. Find his expenditure in March.

20. A piece of wood is cut into 3 pieces A, B and C, in the ratio 2 : 3 : 5. If C is longer than B by 8 cm, find the length of the stick.

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