

- 1 (a) Kristian and Stephanie share some money in the ratio 3 : 2.  
Kristian receives \$72.

- (i) Work out how much Stephanie receives.

$$\frac{2}{3} \times \$72 = \$48$$

\$ ..... <sup>48</sup> ..... [2]

- (ii) Kristian spends 45% of his \$72 on a computer game.

Calculate the price of the computer game.

$$\frac{45}{100} \times \$72 = \$32.40$$

\$ ..... <sup>32.40</sup> ..... [1]

- (iii) Kristian also buys a meal for \$8.40.

Calculate the fraction of the \$72 Kristian has left after buying the computer game and the meal.  
Give your answer in its lowest terms.

$$\begin{aligned} \text{Money left: } & \$72 - \$32.40 - \$8.40 \\ & = \$31.20 \end{aligned}$$

$$\begin{aligned} \frac{31.20}{72} &= \frac{31.2 \times 10}{72 \times 10} \\ &= \frac{312 \div 24}{720 \div 24} \\ &= \frac{13}{30} \end{aligned}$$

..... <sup>13</sup>/<sub>30</sub> ..... [2]

- (iv) Stephanie buys a book in a sale for \$19.20.  
This sale price is after a reduction of 20%.

Calculate the original price of the book.

Original price	Reduction	Sale price
100%	20%	80%
x		\$19.20

$$\frac{100\%}{x} = \frac{80\%}{\$19.20}$$

$$100 \cdot 19.20 = 80 \cdot x$$

$$1920 = 80x$$

$$\frac{1920}{80} = x$$

$$24 = x$$

\$ ..... <sup>24</sup> ..... [3]