

Answer on Question#54690 – Math – Other

(A) \$2100

(B) \$630

Question

A sum of money is to be divided among Ali, Brent and Carol in the ratio 2: 3: 5, Carol's share amounts to \$1050. Calculate

(A) The total sum of money to be shared

(B) Brent's share

Solution

Convert the ratio 2: 3: 5 to the form of the unit fraction (make sum equal to the unit).

$$2:3:5 \rightarrow \frac{2}{2+3+5} : \frac{3}{2+3+5} : \frac{5}{2+3+5} \rightarrow \frac{2}{10} : \frac{3}{10} : \frac{5}{10} \rightarrow \frac{1}{5} : \frac{3}{10} : \frac{1}{2}$$

(A) We know that $\frac{1}{2}$ of total sum of money (Carol) equal to \$1050, hence total sum of money should be equal to $\$1050 * 2 = \2100

(B) So now, we can easily calculate Brent's share: $\$2100 * \frac{3}{10} = \630