

A Maths Question, PSLE 2020

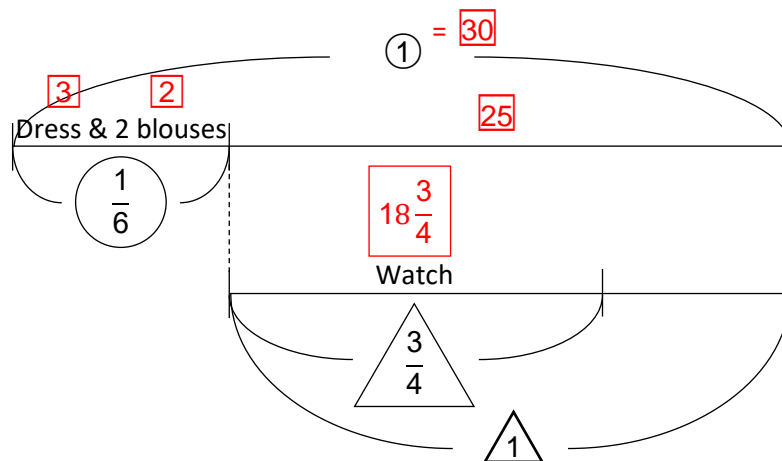
Q17

Cassie spent $\frac{1}{6}$ of her money on a dress and 2 blouses and spent $\frac{3}{4}$ of the remaining money on a watch. The cost of a dress is three times the cost of a blouse. She spent \$220.50 more on the watch than the dress.

- (a) What fraction of her money did she spend on one blouse?
 (b) What was the amount of money she had at first?

<< Corresponding Maths >>

<Diagram>



<Writing>

- (a) Let ① be the cost of a blouse.

$$3 \times \text{①} = \text{③} \quad \rightarrow \text{the cost of a dress}$$

$$\text{③} + \text{②} = \text{⑤} \quad \rightarrow \text{the cost of a dress and 2 blouses}$$

Since ⑤ corresponds to $\frac{1}{6}$ of ① which is the amount of money she had at first,

$$\text{⑤} \div \frac{1}{6} = \text{③0} \quad \rightarrow \text{①}$$

$$\text{①} \div \text{③0} = \frac{1}{30}$$

- (b) $\text{③0} - \text{⑤} = \text{②5}$

$$\text{②5} \times \frac{3}{4} = \frac{75}{4} = 18\frac{3}{4} \quad \rightarrow \text{the cost of a watch}$$

$$18\frac{3}{4} - \text{③} = 15\frac{3}{4} \quad \rightarrow \text{This corresponds to } \$220.50$$

$$\$220.50 \div 15\frac{3}{4} = \$14.00 \quad \rightarrow \text{①}$$

$$\$14 \times 30 = \$420 \quad \rightarrow \text{①}$$

Answer (a) $\frac{1}{30}$ (b) \$420