

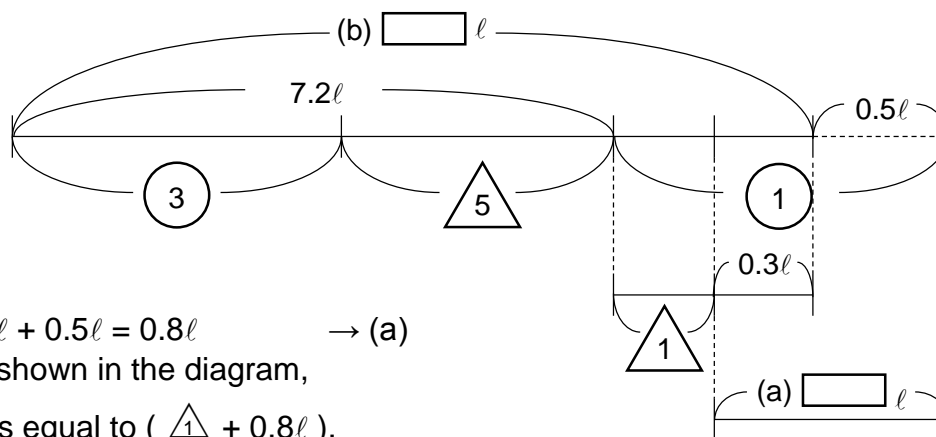
A Maths Question, PSLE 2015

When Sandy filled 3 big bottles and 5 small bottles with 7.2 l of drink, she had some left. She can't put the leftovers in a big bottle as she's short of 0.5 l . So, she filled a small bottle and had 0.3 l left.

- (a) Find the difference between the capacity of a big bottle and a small bottle.
 (b) How much drink does Sandy have?

<< Corresponding Maths >>

Let $\textcircled{1}$ and $\triangle 1$ be the capacity of the big bottle and the small bottle respectively.



$$0.3\text{ l} + 0.5\text{ l} = 0.8\text{ l} \quad \rightarrow \text{(a)}$$

As shown in the diagram,

$\textcircled{1}$ is equal to $(\triangle 1 + 0.8\text{ l})$.

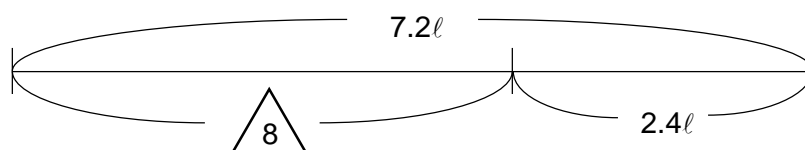
Thus, $\textcircled{3}$ will be

$$3 \times \triangle 1 = \triangle 3$$

$$3 \times 0.8\text{ l} = 2.4\text{ l}$$

$$\triangle 3 + 2.4\text{ l} \rightarrow \textcircled{3}$$

$$\triangle 3 + \triangle 5 = \triangle 8$$



$$7.2\text{ l} - 2.4\text{ l} = 4.8\text{ l} \quad \rightarrow \triangle 8$$

$$4.8\text{ l} \div \triangle 8 = 0.6\text{ l} \quad \rightarrow \triangle 1$$

$$0.6\text{ l} + 0.8\text{ l} = 1.4\text{ l} \quad \rightarrow \textcircled{1}$$

$$\textcircled{3} + \triangle 5 + \triangle 1 + 0.3\text{ l} \rightarrow$$

$$3 \times 1.4\text{ l} + 5 \times 0.6\text{ l} + 0.6\text{ l} + 0.3\text{ l} = 8.1\text{ l} \quad \rightarrow \text{(b)}$$

Answer (a) 0.8 l (b) 8.1 l