

算数オンライン塾 9月30日の問題解説

(1) Xをあ個、Yをい個、Zをう個作ったとすると

$$\text{あ} + \text{い} = 35 \cdots \text{①}$$

$$4 \times \text{あ} + 2 \times \text{う} = 120 \cdots \text{②}$$

$$3 \times \text{あ} + 2 \times \text{い} = 80 \cdots \text{③}$$

$$\text{①} \times 2 \rightarrow 2 \times \text{あ} + 2 \times \text{い} = 70 \cdots \text{④}$$

$$\text{③} - \text{④} \rightarrow \text{あ} = 10 \quad \text{い} = 25 \quad \text{②から} (120 - 10 \times 4) \div 2 = 40 \cdots \text{う}$$

$$\text{Cは} 3 \times \text{い} + 4 \times \text{う} = 3 \times 25 + 4 \times 40 = 75 + 160 = 235$$

(答え) 235 個

(2) Xをあ個、Yをい個、Zをう個作ったとすると

$$\text{あ} + \text{い} + \text{う} = 65 \cdots \text{①}$$

$$4 \times \text{あ} + 2 \times \text{う} = 120 \cdots \text{②}$$

$$3 \times \text{あ} + 2 \times \text{い} = 80 \cdots \text{③}$$

$$\text{①} \times 2 \rightarrow 2 \times \text{あ} + 2 \times \text{い} + 2 \times \text{う} = 130 \cdots \text{④}$$

$$\text{②} + \text{③} \rightarrow 7 \times \text{あ} + 2 \times \text{い} + 2 \times \text{う} = 200 \cdots \text{⑤}$$

$$\text{⑤} - \text{④} \rightarrow 5 \times \text{あ} = 200 - 130 = 70 \quad \text{あ} = 14$$

$$(80 - 3 \times 14) \div 2 = 19 \cdots \text{い} \quad \text{う} = 65 - 14 - 19 = 32$$

$$\text{Cは} 3 \times \text{い} + 4 \times \text{う} = 3 \times 19 + 4 \times 32 = 57 + 128 = 185$$

(答え) 185 個