

## RATIO

### REPEATED IDENTITY - Solutions

#### Question 1.

Ron	:	Ted		Ted	:	Bob
$3 \times 2$	:	$5 \times 2$		$2 \times 5$	:	$3 \times 5$
6	:	10		10	:	15

	Ron	:	Ted	:	Bob	
	6	:	10	:	15	

Total units  $\rightarrow$  6 units + 10 units + 15 units  $\rightarrow$  31 units

31 units  $\rightarrow$  1240

1 unit  $\rightarrow$   $1240 \div 31 = 40$

Difference between the amount Bob and Ron have  $\rightarrow$  15 units – 6 units = 9 units

$$\begin{aligned} &\rightarrow 9 \times 40 \\ &= 360 \end{aligned}$$

#### Question 2.

Ali	:	Hans		Hans	:	Sue
$7 \times 4$	:	$5 \times 4$		$4 \times 5$	:	$9 \times 5$
28	:	20		20	:	45

	Ali	:	Hans	:	Sue	
	28	:	20	:	45	

Difference between the number of biscuits of Sue and Ali  $\rightarrow$  45- 28 = 17 units

17 units  $\rightarrow$  34

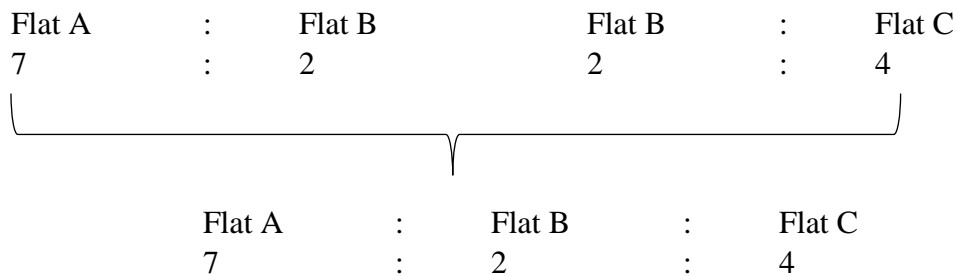
1 unit  $\rightarrow$   $34 \div 17 = 2$

Total units  $\rightarrow$  28 units + 20 units + 45 units  $\rightarrow$  93 units

93 units  $\rightarrow$   $93 \times 2 = 186$

They had 186 biscuits altogether.

Question 3.



Total units  $\rightarrow 7$  units + 2 units + 4 units  $\rightarrow 13$  units

13 units  $\rightarrow 1300$

1 unit  $\rightarrow 1300 \div 13 = 100$

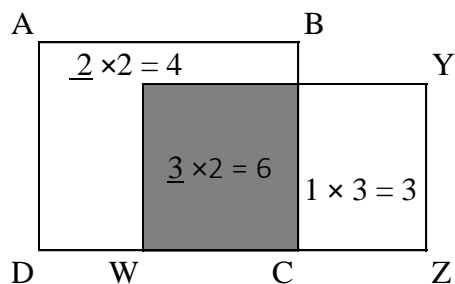
Difference between the apartments in Flat A and Flat C  $\rightarrow 7$  units  $- 4$  units = 3 units

$\rightarrow 3 \times 100$

= 300

There are 300 more apartments in Flat A than Flat C.

Question 4.



6 units  $\rightarrow 54$

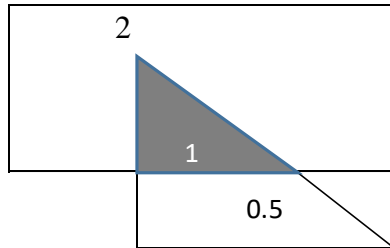
1 unit  $\rightarrow 54 \div 6 = 9$

Total units  $\rightarrow 4$  units + 6 units + 3 units = 13 units

$\rightarrow 13 \times 9 = 117$

The area of this figure is 117 cm<sup>2</sup>

Question 5



Total units  $\rightarrow$  2units + 1unit + 0.5 unit = 3.5units

3.5 units  $\rightarrow$   $49 \div 3.5 = 14$

Shaded area  $\rightarrow$  1 unit = 14

The area of the shaded part is  $14 \text{ cm}^2$