

**CTT****Question 1**

A, B and C had 256 cookies. A had 6 more cookies than B. B had twice as many cookies as C. How many cookies did C have?

Ans: \_\_\_\_\_

**CTT****Question 2**

3 boxes of chocolate cookies and a box of strawberry cookies cost \$49.20. Each box of chocolate cookies cost \$10 less than a box of strawberry cookies. How much did a box of chocolate cookies and a box of strawberry cookies cost?

Ans: \_\_\_\_\_

**Question 3**

A box of chocolate cookies, a box of strawberry cookies and a box of vanilla cookies cost \$11. A box of chocolate cookies cost \$1.50 more than a box of strawberry cookies. A box of strawberry cookies cost  $\frac{1}{3}$  as much as a box of vanilla cookies. How much did a box of strawberry cookies cost?

Ans: \_\_\_\_\_

**Question 4**

The sum of 2 numbers is 1022. The difference between the 2 numbers is 170. What is the greater number?

Ans: \_\_\_\_\_

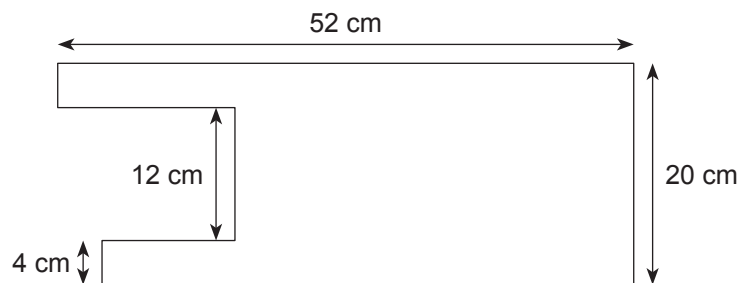
## Question 5

A spent some money on cookies each day. Every day, A spent \$0.50 more than the day before. A spent \$25 at the end of 5 days. How much did A spend on the 4<sup>th</sup> day?

Ans: \_\_\_\_\_

## Question 6

A 12-cm square and a 4-cm square was cut out from the figure. Find the perimeter of the figure.



Ans: \_\_\_\_\_

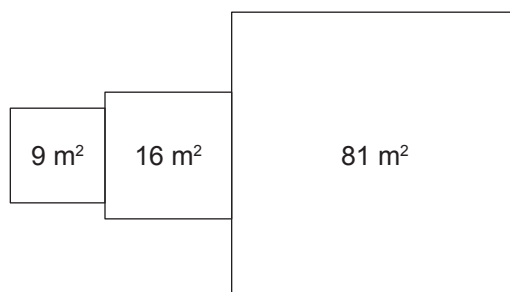
**Question 7**

A and B had some cookies. If A gave B 100 cookies, A and B would have an equal number of cookies. How many more cookies did A have than B at first?

Ans: \_\_\_\_\_

**Question 8**

Find the perimeter of the figure.



Ans: \_\_\_\_\_

**Question 9**

A had a box of cookies. A ate  $\frac{1}{6}$  of the box of cookies in the morning, 38 cookies in the afternoon and the remaining 112 cookies at night. How many cookies were there in the box?

Ans: \_\_\_\_\_

**Question 10**

A had a box of cookies. A gave away 78 cookies in the morning,  $\frac{4}{7}$  of the box of cookies in the afternoon and the remaining 18 cookies at night. How many cookies were there in the box?

Ans: \_\_\_\_\_

**Question 11**

A and B had the same number of cookies. After A gave 120 cookies to B, B had 9 times as many cookies as A. How many cookies did A and B have at first?

Ans: \_\_\_\_\_

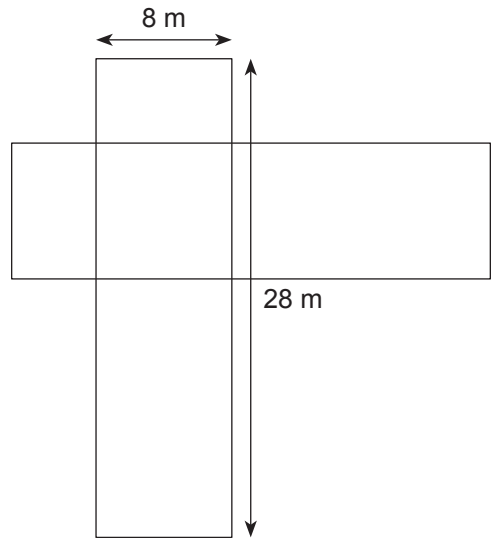
**Question 12**

A had 180 more cookies than B at first. After A gave away 40 cookies and B gave away 20 cookies, A had twice as many cookies as B left. How many cookies did A and B have at first?

Ans: \_\_\_\_\_

**Question 13**

Find the perimeter of the figure.



Ans: \_\_\_\_\_

**Question 14**

A and B had an equal number of cookies. After A bought 96 cookies and B gave away 24 cookies, A had thrice as many cookies as B. How many cookies did A and B have at first?

Ans: \_\_\_\_\_

**Question 15**

A box containing 8 cookies weighed 750 g. A box containing 3 cookies weighed 425 g. What was the mass of the box?

Ans: \_\_\_\_\_

**Question 16**

A had 4 times as many cookies as B. After B bought 42 cookies, A had 6 fewer cookies than B. How many cookies did B have in the end?

Ans: \_\_\_\_\_



**Question 17**

A rectangular cookie box measuring 58 cm by 86 cm has a border of 10 cm around the sides inside the box. 6-cm square cookies were placed inside the box. How many cookies can be placed inside the box?

Ans: \_\_\_\_\_

**Question 18**

A box of chocolate cookies and 3 boxes of strawberry cookies cost \$60. A box of strawberry cookies cost  $\frac{1}{2}$  as much as a box of chocolate cookies. How much did a box of strawberry cookies cost?

Ans: \_\_\_\_\_

**Question 19**

A big box of chocolate cookies, a big box of strawberry cookies and 2 small boxes of vanilla cookies cost \$40. A big box of cookies cost 4 times as much as a small box of cookies. How much did a small box of cookies cost?

Ans: \_\_\_\_\_

**Question 20**

A box of chocolate cookies and 4 boxes of strawberry cookies cost \$88. A box of chocolate cookies cost as much as 4 boxes of strawberry cookies. How much did a box of strawberry cookies cost?

Ans: \_\_\_\_\_

**Question 21**

There were 6 cartons of cookies. After 2 cartons were opened, the boxes of cookies were repacked into the remaining 4 cartons. In the end, each carton had 8 extra boxes. How many boxes of cookies were there?

Ans: \_\_\_\_\_

**Question 22**

2 boxes of chocolate cookies and 2 boxes of strawberry cookies contained 4320 cookies. A box of chocolate cookies contained  $\frac{1}{3}$  as many cookies as a box of strawberry cookies. How many cookies were there in a box of strawberry cookies?

Ans: \_\_\_\_\_

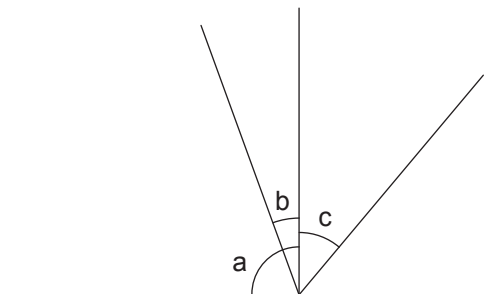
**Question 23**

A chocolate cookie cost as much as 2 strawberry cookies. 1 chocolate cookie and 2 strawberry cookies cost \$9.60. How much did a strawberry cookie cost?

Ans: \_\_\_\_\_

**Question 24**

$\angle a$  is a right angle.  $\angle b$  and  $\angle c$  are  $\frac{2}{3}$  the size of  $\angle a$ .  $\angle c$  is twice of  $\angle b$ . Find  $\angle b$ .



Ans: \_\_\_\_\_

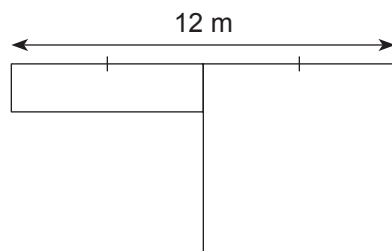
**Question 25**

There were 1801 cookies in 10 boxes of cookies. There were 155 cookies in each of the first 8 boxes. The 10<sup>th</sup> box contained  $\frac{1}{2}$  as many cookies as the 9<sup>th</sup> box. How many cookies were there in the 10<sup>th</sup> box?

Ans: \_\_\_\_\_

**Question 26**

The area of the figure is 60 m<sup>2</sup>. The side of the square is 4 times the breadth of the rectangle. Find the perimeter of the figure.



Ans: \_\_\_\_\_

**Question 27**

A and B had 875 cookies. A had  $\frac{2}{5}$  as many cookies as B. How many cookies did A have?

Ans: \_\_\_\_\_

**Question 28**

A is  $\frac{2}{3}$  as old as B. Their total age in 4 years' time is 38 years. How much older is B than A?

Ans: \_\_\_\_\_

**Question 29 (MAS/WIR)**

What letter would the number 999 be found under?

<b>C</b>	<b>O</b>	<b>O</b>	<b>K</b>	<b>I</b>	<b>E</b>	<b>S</b>
1	2	3	4	5	6	7
8	9	10				

Ans: \_\_\_\_\_

**Question 30 (MAS/WIR)**

What is the 58<sup>th</sup> shape?



Ans: \_\_\_\_\_

**Question 31 (SNC/WIU)**

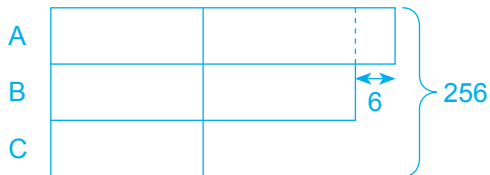
A had 900 cookies and B had 420 cookies. How many cookies must A give to B so that B would have 5 times as many cookies as A?

Ans: \_\_\_\_\_



## CTT

## Question 1



$$5 \text{ units} = 256 - 6 = 250$$

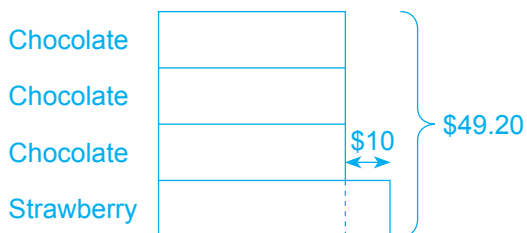
$$1 \text{ unit} = 250 \div 5 = 50$$

C  $\rightarrow$  50 cookies

Ans: 50 cookies

## CTT

## Question 2



$$4 \text{ units} = \$49.20 - \$10 = \$39.20$$

$$1 \text{ unit} = \$39.20 \div 4 = \$9.80$$

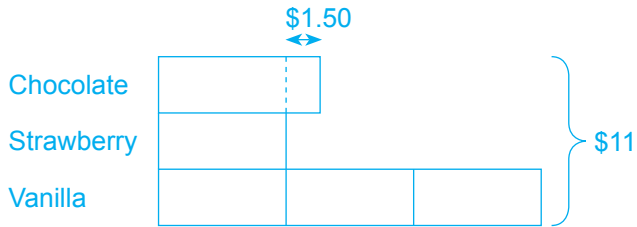
Chocolate  $\rightarrow$  \$9.80

Strawberry  $\rightarrow$  \$9.80 + \$10 = \$19.80

Chocolate + Strawberry  $\rightarrow$  \$9.80 + \$19.80 = \$29.60

Ans: \$29.60

## Question 3



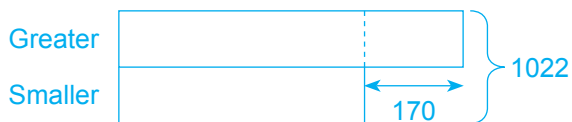
$$5 \text{ units} = \$11 - \$1.50 = \$9.50$$

$$1 \text{ unit} = \$9.50 \div 5 = \$1.90$$

Strawberry  $\rightarrow$  \$1.90

Ans:     \$1.90    

## Question 4



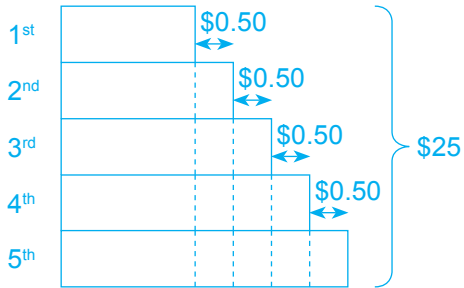
$$2 \text{ units} = 1022 - 170 = 852$$

$$1 \text{ unit} = 852 \div 2 = 426$$

Greater  $\rightarrow$   $426 + 170 = 596$

Ans:     596

## Question 5



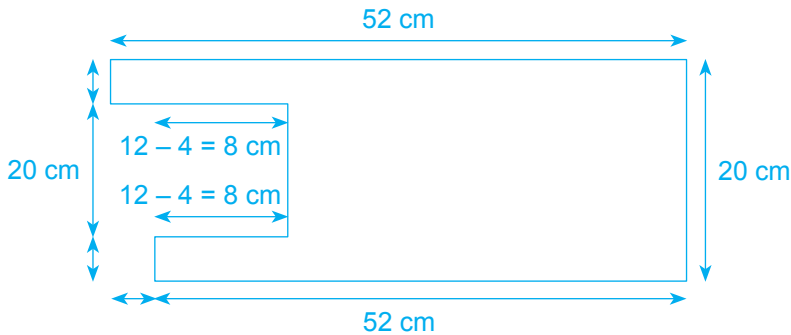
$$\begin{aligned} 5 \text{ units} &= \$25 - 10 \times \$0.50 \\ &= \$25 - \$5 \\ &= \$20 \end{aligned}$$

$$1 \text{ unit} = \$20 \div 5 = \$4$$

$$\begin{aligned} 4^{\text{th}} &\rightarrow \$4 + 3 \times \$0.50 \\ &= \$4 + \$1.50 \\ &= \$5.50 \end{aligned}$$

Ans: \$5.50

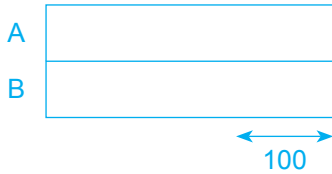
## Question 6



$$\text{Perimeter} \rightarrow 52 + 20 + 52 + 20 + 8 + 8 = 160 \text{ cm}$$

Ans: 160 cm

Question 7

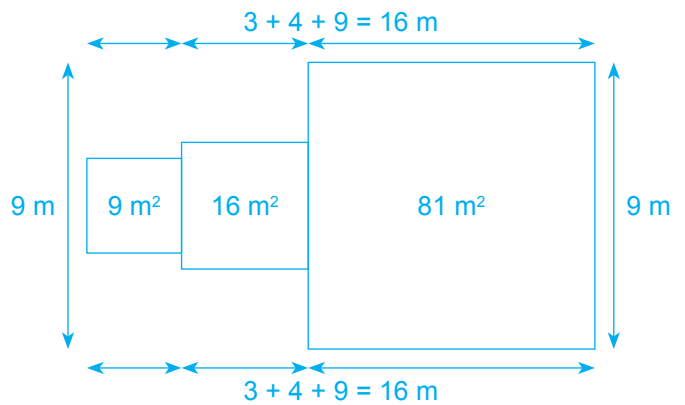


More (at first)  $\rightarrow 100 + 100 = 200$  cookies

Ans: 200 more cookies

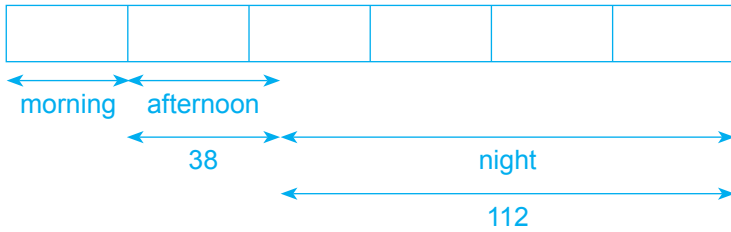
Question 8

- Area (small square)  $\rightarrow 9 \text{ m}^2$   
 $\rightarrow 3 \text{ m} \times 3 \text{ m}$
- Side (small square)  $\rightarrow 3 \text{ m}$
- Area (medium square)  $\rightarrow 16 \text{ m}^2$   
 $\rightarrow 4 \text{ m} \times 4 \text{ m}$
- Side (medium square)  $\rightarrow 4 \text{ m}$
- Area (large square)  $\rightarrow 81 \text{ m}^2$   
 $\rightarrow 9 \text{ m} \times 9 \text{ m}$
- Side (large square)  $\rightarrow 9 \text{ m}$
- Perimeter  $\rightarrow 16 + 9 + 16 + 9 = 50 \text{ m}$



Ans: 50 m

Question 9



$$5 \text{ units} = 38 + 112 = 150$$

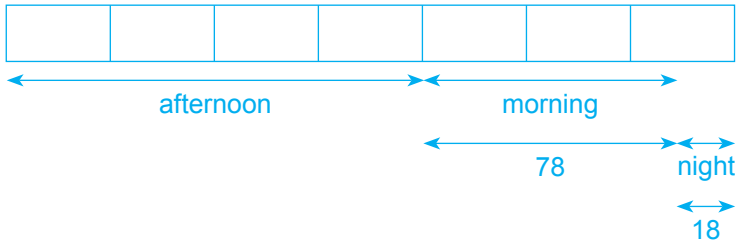
$$1 \text{ unit} = 150 \div 5 = 30$$

$$6 \text{ units} = 6 \times 30 = 180$$

Box  $\rightarrow$  180 cookies

Ans: 180 cookies

Question 10



$$3 \text{ units} = 78 + 18 = 96$$

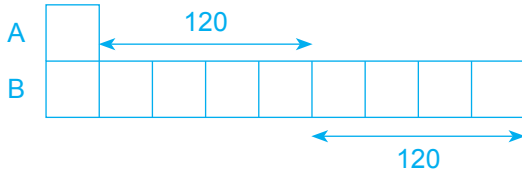
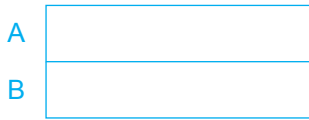
$$1 \text{ unit} = 96 \div 3 = 32$$

$$7 \text{ units} = 7 \times 32 = 224$$

Box  $\rightarrow$  224 cookies

Ans: 224 cookies

Question 11



$8 \text{ units} = 120 + 120 = 240$

$1 \text{ unit} = 240 \div 8 = 30$

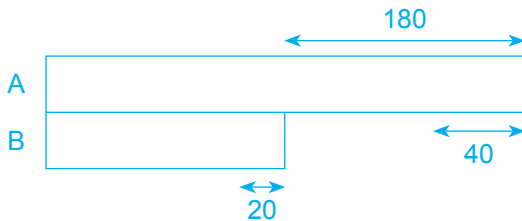
A (end)  $\rightarrow 30$  cookies

A (at first)  $\rightarrow 30 + 120 = 150$  cookies

Total  $\rightarrow 2 \times 150 = 300$  cookies

Ans: 300 cookies

Question 12



$1 \text{ unit} = 20 + 180 - 40 = 160$

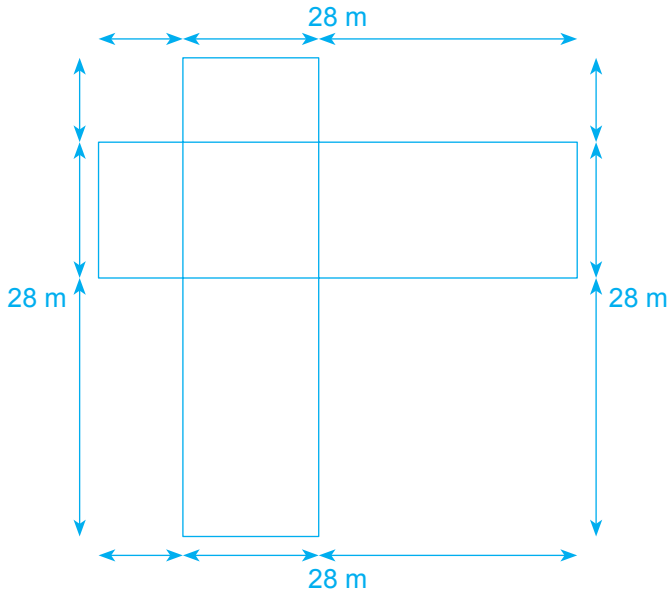
$3 \text{ units} = 3 \times 160 = 480$

Total (end)  $\rightarrow 480$  cookies

Total (at first)  $\rightarrow 480 + 40 + 20 = 540$  cookies

Ans: 540 cookies

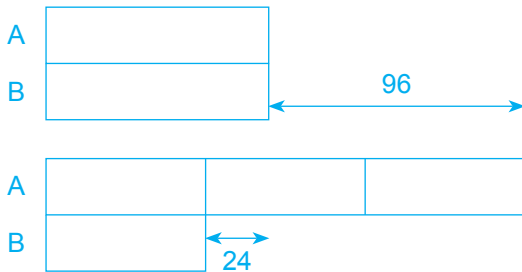
Question 13



Perimeter  $\rightarrow 28 + 28 + 28 + 28 = 112 \text{ m}$

Ans: 112 m

Question 14



$2 \text{ units} = 24 + 96 = 120$

$1 \text{ unit} = 120 \div 2 = 60$

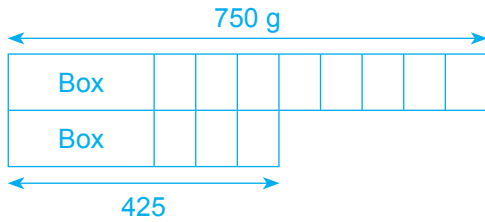
B (end)  $\rightarrow 60 \text{ cookies}$

B (at first)  $\rightarrow 60 + 24 = 84 \text{ cookies}$

Total (at first)  $\rightarrow 2 \times 84 = 168 \text{ cookies}$

Ans: 168 cookies

Question 15



$$5 \text{ units} = 750 - 425 = 325 \text{ g}$$

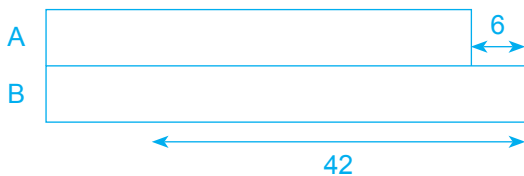
$$1 \text{ unit} = 325 \div 5 = 65 \text{ g}$$

$$8 \text{ units} = 8 \times 65 = 520 \text{ g}$$

$$\text{Box} \rightarrow 750 - 520 = 230 \text{ g}$$

Ans: 230 g

Question 16



$$3 \text{ units} = 42 - 6 = 36$$

$$1 \text{ unit} = 36 \div 3 = 12$$

$$\text{B (at first)} \rightarrow 12 \text{ cookies}$$

$$\text{B (end)} \rightarrow 12 + 42 = 54 \text{ cookies}$$

Ans: 54 cookies



## Question 17

Length (placed)  $\rightarrow 58 - 10 - 10 = 38$  cm

Breadth (placed)  $\rightarrow 86 - 10 - 10 = 66$  cm

Number of 6-cm cookies along 38 cm  $\rightarrow 38 \div 6 = 6$  R 2 cm

Maximum 6-cm cookies along 38 cm  $\rightarrow 6$  cookies

Number of 6-cm cookies along 66 cm  $\rightarrow 66 \div 6 = 11$  cookies

Total  $\rightarrow 6 \times 11 = 66$  cookies

Ans: 66 cookies

## Question 18

Strawberry  $\rightarrow 1$  unit

Chocolate  $\rightarrow 2$  units

1 chocolate + 3 strawberry  $\rightarrow 1 \times 2 + 3 \times 1 = 2 + 3 = 5$  units  
 $\rightarrow \$60$

5 units = \$60

1 unit =  $\$60 \div 5 = \$12$

Strawberry  $\rightarrow \$12$

Ans: \$12

**Question 19**

Chocolate → 4 units

Strawberry → 4 units

Small → 1 unit

$$1 \text{ chocolate} + 1 \text{ strawberry} + 2 \text{ small} \rightarrow 1 \times 4 + 1 \times 4 + 2 \times 1 = 4 + 4 + 2 = 10 \text{ units}$$

$$\rightarrow \$40$$

10 units = \$40

1 unit =  $\$40 \div 10 = \$4$ 

Small → \$4

Ans: \_\_\_\_\_ \$4

**Question 20**

Chocolate → 4 units

Strawberry → 1 unit

$$1 \text{ chocolate} + 4 \text{ strawberry} \rightarrow 1 \times 4 + 4 \times 1 = 4 + 4 = 8 \text{ units}$$

$$\rightarrow \$88$$

8 units = \$88

1 unit =  $\$88 \div 8 = \$11$ 

Strawberry → \$11

Ans: \_\_\_\_\_ \$11

**Question 21**

At first → 6 units

End → 4 units

Repacked →  $6 - 4 = 2$  units

→  $4 \times 8 = 32$  boxes

2 units = 32 boxes

1 unit =  $32 \div 2 = 16$  boxes

At first →  $6 \times 16 = 96$  boxes

Ans: 96 boxes

**Question 22**

Chocolate → 1 unit

Strawberry → 3 units

2 chocolate + 2 strawberry →  $2 \times 1 + 2 \times 3 = 2 + 6 = 8$  units

→ 4320 cookies

8 units = 4320 cookies

1 unit =  $4320 \div 8 = 540$  cookies

3 units =  $3 \times 540 = 1620$  cookies

Strawberry → 1620 cookies

Ans: 1620 cookies

## Question 23

Chocolate  $\rightarrow$  2 units

Strawberry  $\rightarrow$  1 unit

1 chocolate + 2 strawberry  $\rightarrow 1 \times 2 + 2 \times 1 = 2 + 2 = 4$  units  
 $\rightarrow$  \$9.60

4 units = \$9.60

1 unit = \$9.60  $\div$  4 = \$2.40

Strawberry  $\rightarrow$  \$2.40

Ans:           \$2.40          

## Question 24

$\angle b + \angle c \rightarrow$  2 units

$\angle a \rightarrow$  3 units

$\rightarrow 90^\circ$  (right  $\angle$ )

3 units =  $90^\circ$

1 unit =  $90^\circ \div 3 = 30^\circ$

2 units =  $2 \times 30^\circ = 60^\circ$

$\angle b + \angle c \rightarrow 60^\circ$

$\angle c \rightarrow$  2 units

$\angle b \rightarrow$  1 unit

$\angle b + \angle c \rightarrow 1 + 2 = 3$  units  
 $\rightarrow 60^\circ$

3 units =  $60^\circ$

1 unit =  $60^\circ \div 3 = 20^\circ$

$\angle b \rightarrow 20^\circ$

Ans:           20°

## Question 25

First 8 boxes  $\rightarrow 8 \times 155 = 1240$  cookies

9<sup>th</sup> and 10<sup>th</sup> box  $\rightarrow 1801 - 1240 = 561$  cookies

10<sup>th</sup> box  $\rightarrow 1$  unit

9<sup>th</sup> box  $\rightarrow 2$  units

9<sup>th</sup> and 10<sup>th</sup> box  $\rightarrow 1 + 2 = 3$  units  
 $\rightarrow 561$  cookies

3 units = 561 cookies

1 unit =  $561 \div 3 = 187$  cookies

10<sup>th</sup> box  $\rightarrow 187$  cookies

Ans: 187 cookies

## Question 26

Side (square)  $\rightarrow 4$  units

Breadth (rectangle)  $\rightarrow 1$  unit

Length (rectangle)  $\rightarrow 12 \div 2 = 6$  m

Side (square)  $\rightarrow 4$  units  
 $\rightarrow 6$  m

4 units = 6 m

1 unit =  $6 \div 4 = 1.5$  m

Breadth (rectangle)  $\rightarrow 1.5$  m

Perimeter (figure)  $\rightarrow 12 + 6 + 6 + (6 - 1.5) + 6 + 1.5 = 36$  m

Ans: 36 m

## Question 27

A → 2 units

B → 5 units

Total →  $2 + 5 = 7$  units

→ 875 cookies

7 units = 875 cookies

1 unit =  $875 \div 7 = 125$  cookies

2 units =  $2 \times 125 = 250$  cookies

A → 250 cookies

Ans: 250 cookies

## Question 28

A (now) → 2 units

B (now) → 3 units

Total (4 years' time) → 38 years

Total (now) →  $2 + 3 = 5$  units

→  $38 - 4 - 4 = 30$  years

5 units = 30 years

1 unit =  $30 \div 5 = 6$  years

Older →  $3 - 2 = 1$  unit

→  $1 \times 6 = 6$  years

Ans: 6 years

**Question 29 (MAS/WIR)**

1 set (C O O K I E S) → 7 letters

Number of sets →  $999 \div 7$

= 142 R 5 letters

R5 → 5<sup>th</sup> letter of set

→ I

Ans:         I        

**Question 30 (MAS/WIR)**



1 set (□□□○△♥) → 6 shapes

Number of sets →  $58 \div 6$

= 9 R 4 shapes

R4 → 4<sup>th</sup> shape of set

→ ○

Ans:         ○

**Question 31 (SNC/WIU)**

Total (at first)  $\rightarrow 900 + 420 = 1320$  cookies

Total never changed.

Total (end)  $\rightarrow 1320$  cookies

B (end)  $\rightarrow 5$  units

A (end)  $\rightarrow 1$  unit

Total (end)  $\rightarrow 5 + 1 = 6$  units

$\rightarrow 1320$  cookies

6 units = 1320 cookies

1 unit =  $1320 \div 6 = 220$  cookies

A (end)  $\rightarrow 220$  cookies

A (to give)  $\rightarrow 900 - 220 = 680$  cookies

Ans: 680 cookies