Let the mind manage the body
Que l'esprit gère le corps

MATHEMATICS
(Subject code No. P120)

Index Number: .....

MAURITIUS EXAMINATIONS SYNDICATE

Primary School Achievement Certificate Assessment
October 2017

Time: 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

1. Check that this assessment booklet contains 45 questions printed on 21 pages numbered 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 14, 15, 16, 17, 18, 19, 20, 21 and 22.
2. Write your Index Number on the assessment booklet in the space provided above.
3. You should not use red, green or black ink in answering questions.
4. Show all your workings clearly in the space provided for each question.
5. Diagrams are not drawn to scale unless stated otherwise.
6. Attempt all questions.

Question	Marking			Revision			Control		
	Marks		Sig	Marks		Sig	Marks		Sig
1 - 10									
11 - 18									
19 - 21									
22 - 25									
26 - 28									
29 - 31									
32 - 34									
35 - 37									
38 - 39									
40									
41									
42									
43									
44									
45									
Total									
Sig (HOG)									

Marks

1. Work out:

$$\begin{array}{r} 3\,2\,7 \\ + \\ \hline 4\,2 \end{array}$$

Answer: _____ [1]

2. Work out:

$$\begin{array}{r} 6\,7\,9 \\ - \\ \hline 4\,2\,3 \end{array}$$

Answer: _____ [1]

3. How many sides does a **quadrilateral** have?

Answer: _____ sides [1]

4. What fraction is found **exactly** between $\frac{4}{7}$ and $\frac{6}{7}$?

Answer: _____ [1]

5. Complete the table below. An example is given.

In words	In figures
Example: Three hundred and forty seven	347
(a) _____ _____	1064
(b) Five hundred and eighty nine	_____

[2]

6. Work out:

$$\begin{array}{r} 421 \\ \times\ 2 \\ \hline \end{array}$$

Answer: _____

[1]

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7. Convert 9 metres into centimetres.

Answer: _____ **cm** [1]

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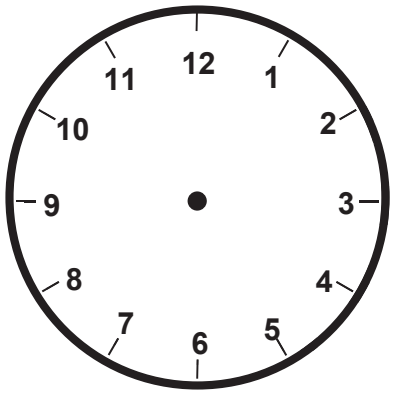
8. The diagram below shows a clockface.
Draw the minute hand and the hour hand on the clockface to show **half past two**.



[1]

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9. Work out:

$$3 \overline{)\ 960}$$

Answer: _____ [1]

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10. Express $\frac{13}{4}$ as a **mixed** number.

Answer: _____ [1]

For each question from numbers 11 to 18, circle the letter which shows the correct answer. An example has been done for you.

6 + 2 =

(A) 8

C 10

B 12

D 14

11. 4^3 =

A 3 × 3 × 3 × 3

C 3 × 3 × 3

B 4 × 4 × 4

D 4 × 3

12. 5284 =

A (4 × 1000) + (8 × 100) + (2 × 10) + (5 × 1)

B (4 × 100) + (8 × 10) + (2 × 1) + (5 × 1000)

C (4 × 10) + (8 × 1) + (2 × 1000) + (5 × 100)

D (4 × 1) + (8 × 10) + (2 ×100) + (5 × 1000)

13. How many lines of symmetry does a **regular hexagon** have?

A 4

B 5

C 6

D 7

14. $\frac{4}{5}$ expressed as a decimal is

A 0.8

B 0.5

C 0.4

D 0.2

15. The area of **one face** of a solid cube is 16 cm^2.

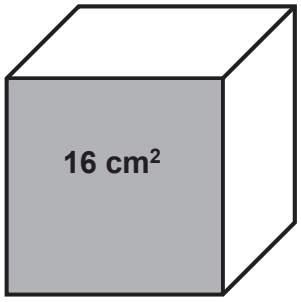
What is the **total surface area** of the cube?

A 4 cm^2

B 8 cm^2

C 64 cm^2

D 96 cm^2



16. 65 % is equivalent to

A 0.065

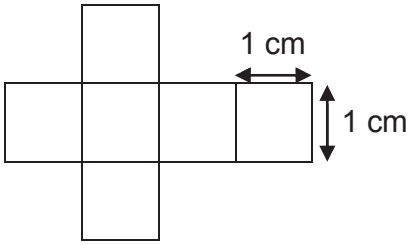
B 0.65

C 6.5

D 65

17. The shape below is made of small squares, each of length 1 cm.

Find the **perimeter** of the shape.



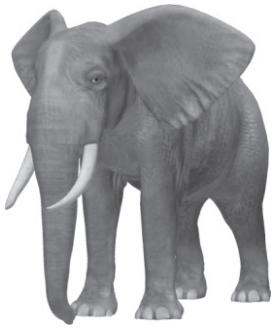
A 6 cm

B 7 cm

C 14 cm

D 19 cm

18. The picture below shows an **adult** elephant.



What could be the mass of the elephant?

A 4500 kg

B 4500 g

C 45 kg

D 45 g

[8]

Marks

19. Here are four number cards.

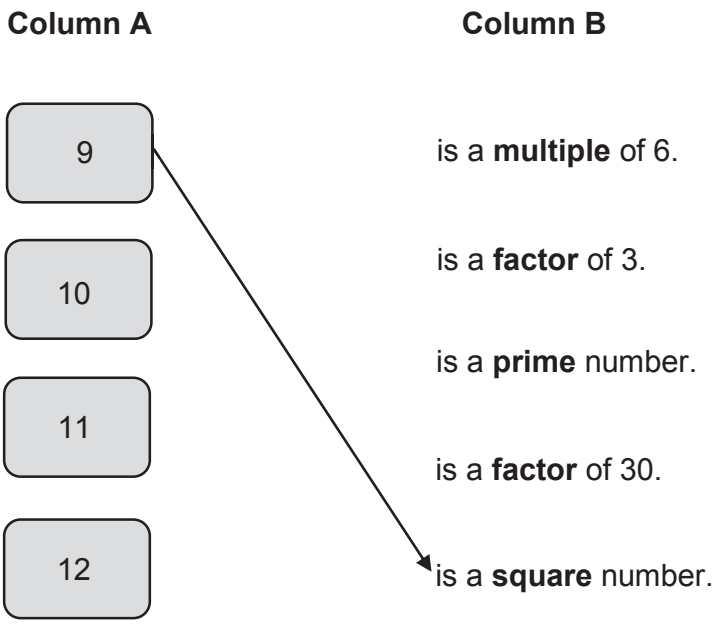
251	521	215	512

In the spaces provided below, arrange the number cards in **ascending** order.

_____	_____	_____	_____

[1]

20. Match each number card in **Column A** with the correct statement in **Column B**.
An example is given.

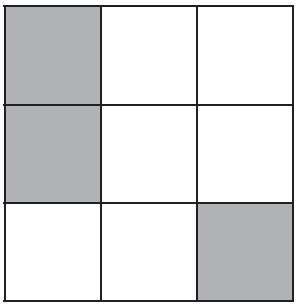


[3]

21. Work out: $\frac{4}{5} \times \frac{2}{3}$.

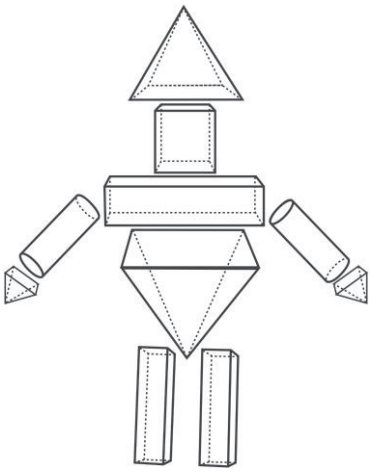
Answer: _____ [1]

22. The diagram below is made of nine small squares.
Shade **one** more small square so that the diagram has **only one** line of symmetry.



[1]

23. A robot is made of four different types of solid shapes as shown below.
Complete the given table. An example is given.

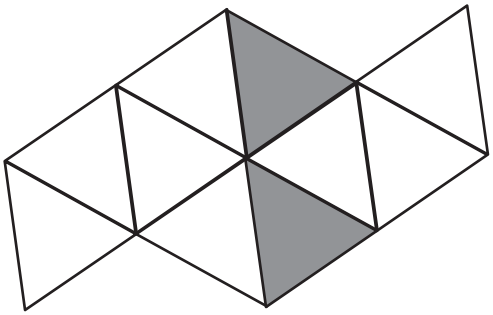


Solid shape	Number of shapes
Example: cube	1
_____	3
pyramid	_____
cylinder	_____

[3]

24. Two small triangles are shaded in the diagram below.

Shade **additional** small triangles so that $\frac{3}{5}$ of the diagram is **shaded**.

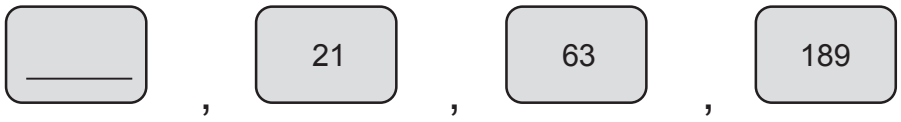


[2]

25. Work out: $1\frac{2}{5} - \frac{3}{5}$.

Answer: _____ [2]

26. Write down the missing number in the given sequence.



[1]

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27. Adi has 48 toys.
He then receives 25 toys for his birthday.

Calculate the number of toys Adi has **in all**.

Answer: _____ **toys** [2]

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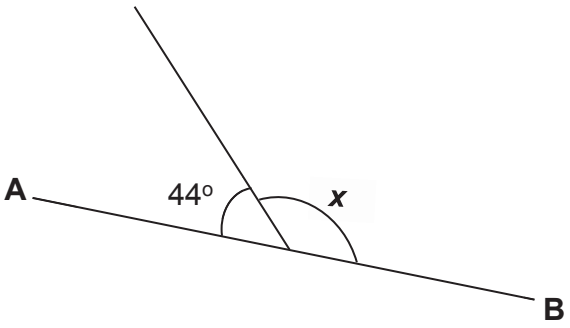
28. **AB** is a straight line.
Calculate the size of angle ***x***.



Answer: angle ***x*** = _____ [2]

29. There are 11.25 litres of water in a water tank.
Kevin uses 3.8 litres of water from the tank to wash his car.

How much water is **left** in the water tank?

Answer: _____ L [2]

30. **£ 1 = Rs 48**

Ben buys a watch for £ 96 and sells it for Rs 7200.

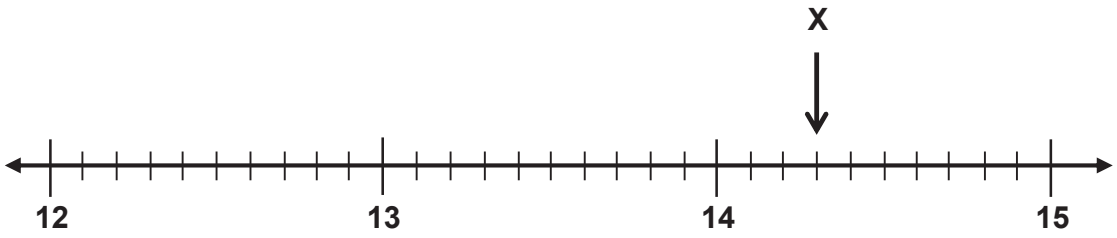
Calculate the **profit** which he makes, **in rupees**.

Answer: Rs _____ [3]

31. Work out: $\frac{4}{9} \div \frac{12}{15}$, giving your answer in its lowest terms.

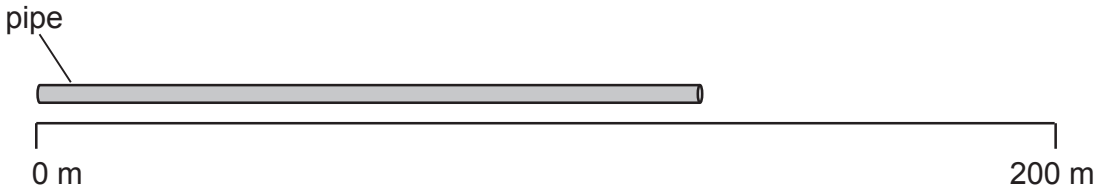
Answer: _____ [2]

32. (a) State the value of **X** shown on the number line.



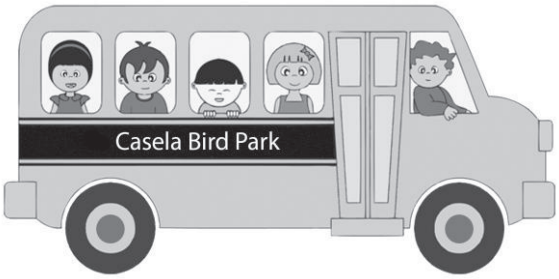
Answer: X = _____ [1]

(b) Estimate the length of the pipe shown below.



Answer: _____ m [1]

33. 40 children are going to *Casela Bird Park* on a school outing.



20 % of these children have been to *Casela Bird Park* **before**.

Calculate the number of children visiting *Casela Bird Park* for the **first time**.

Answer: _____ children [3]

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34. Mrs Bala buys two packets of sugar, each of mass 900 g.

She uses 1 kg 50 g of the sugar to make cakes and some more to make tea.
250 g of the sugar is left.

How many grams of sugar did Mrs Bala use to make tea?

Answer: _____ g [5]

35. The price of a mobile phone is **increased** by 10 %.
The **new price** of the mobile phone is Rs 3960.

Calculate the **original price** of the mobile phone.

Answer: Rs _____ [3]

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36. Tina knows that

521	×	147	=	76 587

Without doing any calculation, help Tina to fill in the empty boxes below.

(a) 76 587 ÷ 521 = _____

(b) 52.1 × 1.47 = _____

(c) _____ × 147 = 76 587 + 147

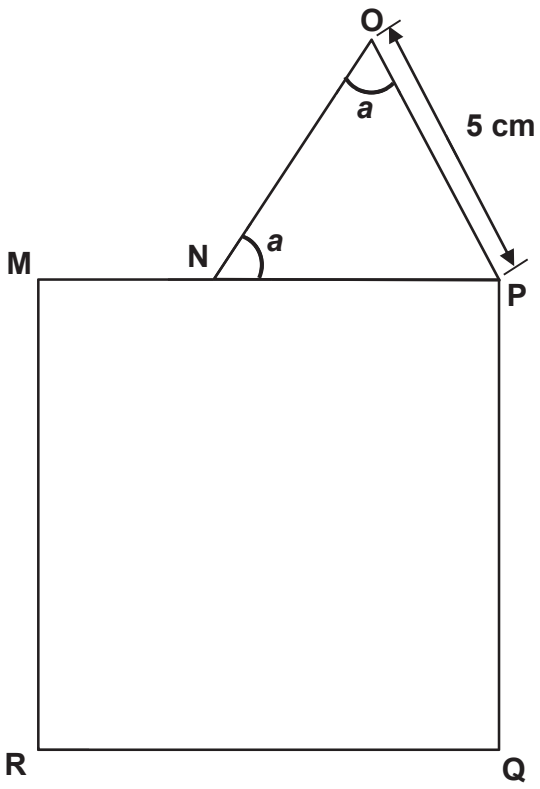
[3]

37. The **area** of square **MPQR** is 64 cm^2.
OPN is an isosceles triangle.
OP = 5 cm.

The **perimeter** of **MNOPQR** is 39 cm.

Calculate the **length** of **ON**.

Not to scale



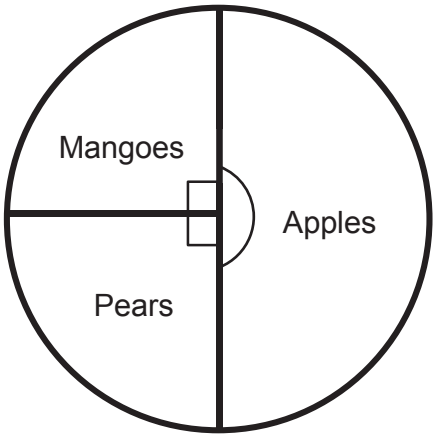
Answer: _____ cm [5]

38. The pie chart below represents the number of mangoes, apples and pears in a basket.

Three friends are talking about the pie chart and make the statements below.

Do you agree with **each** statement? Say **why**.

The first one has been done for you.



Example:

There is an **equal** number of mangoes and pears in the basket.

Agree ✓ **Do not agree** ☐

Reason: The angles representing the number of mangoes and pears are equal.

(a)

There are **more** apples than pears in the basket.

Agree ☐ **Do not agree** ☐

Reason: _____

_____

_____

[2]

(b)

There are **twice** as many mangoes as there are apples in the basket.

Agree ☐ **Do not agree** ☐

Reason: _____

_____

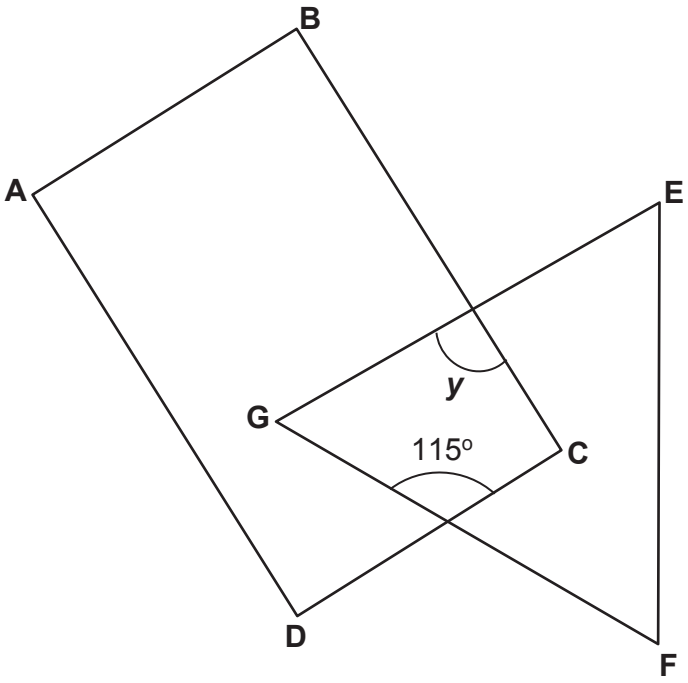
_____

[2]

39. **ABCD** is a rectangle.

EFG is an equilateral triangle.

Not to scale

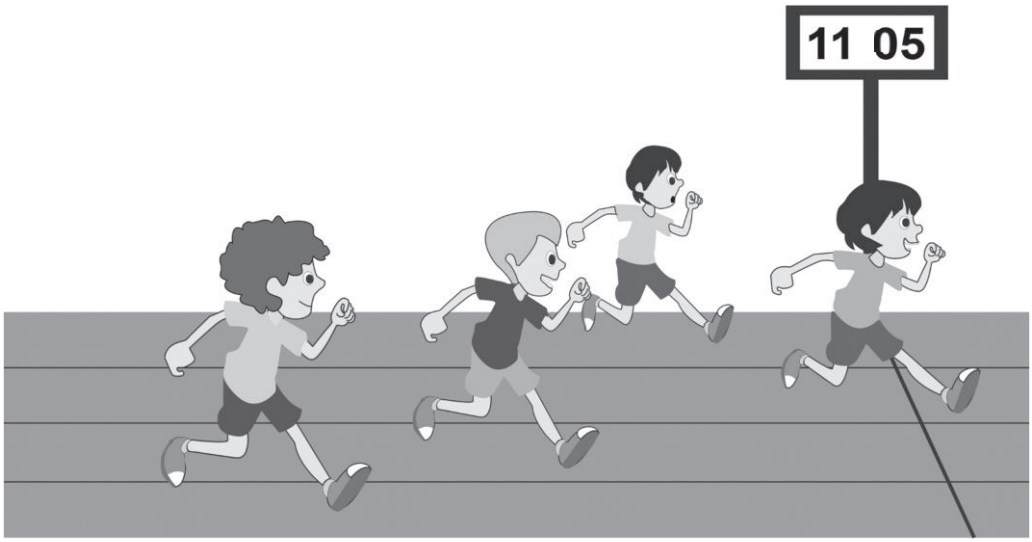


Calculate the size of angle ***y***.

Answer: angle ***y*** = _____ [4]

Marks

40. Paul takes part in a race.
He runs a distance of 8 km at an average speed of 12 km/h.
He crosses the arrival line at 11 05 and wins the race.



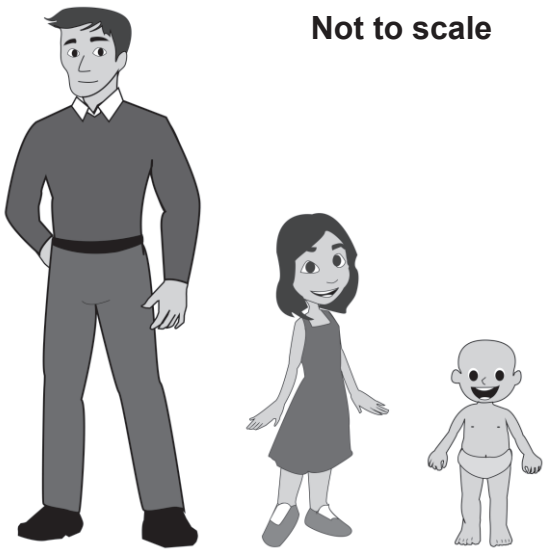
At what time did the race start?

Answer:_____ [4]

41. The **total** height of Judy and her baby brother is the **same** as the height of their father.

Judy is **three times** as tall as her brother.
Their father is 45 cm **taller** than Judy.

Calculate the height of their father.



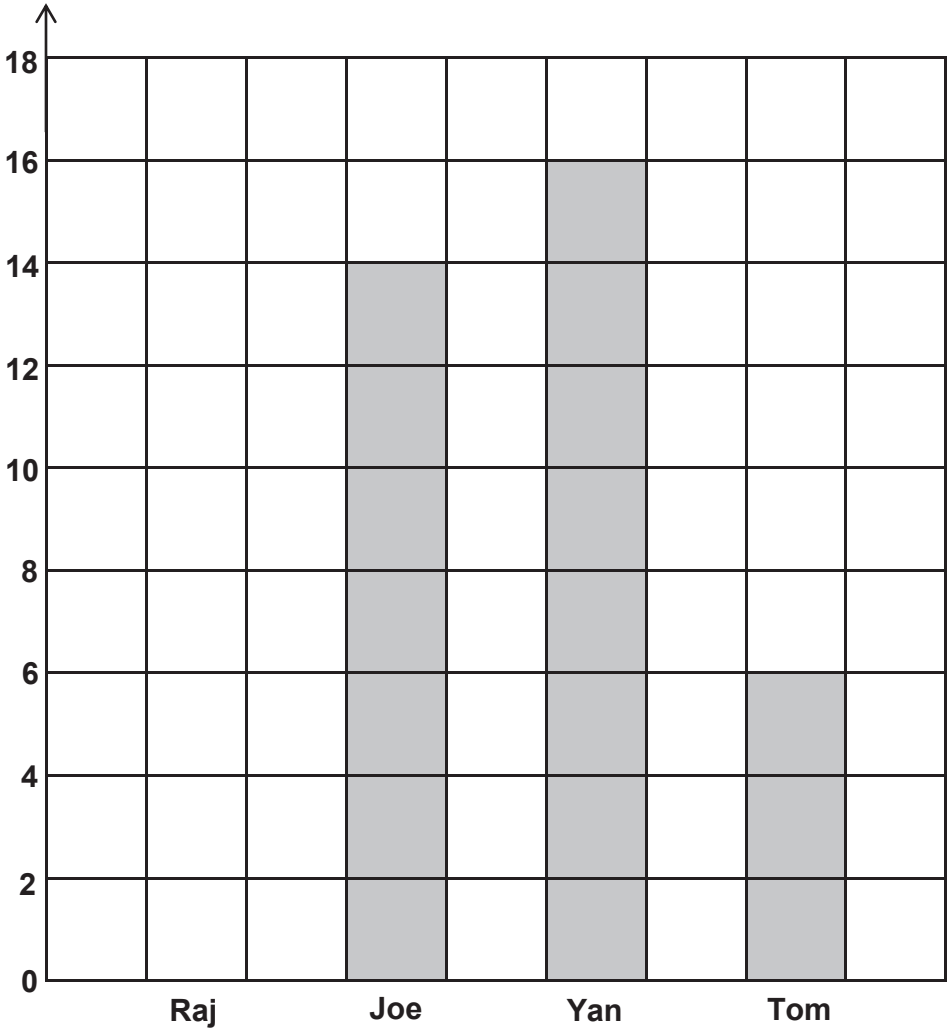
Not to scale

Answer: _____ cm [3]

Marks

42. Four pupils, Raj, Joe, Yan and Tom solve a problem.
The bar chart below represents the time taken by Joe, Yan and Tom to solve the problem.

Time taken in minutes



(a) Given that Raj completes the problem **twice** as fast as Tom, find the time taken by Raj to solve the problem.

Answer: _____ minutes [2]

(b) On the bar chart above, **draw** the bar representing the time taken by Raj to solve the problem.

[1]

(c) Which pupil took the **most** time to solve the problem?

Answer: _____ [1]

(d) Calculate the **average** time taken by the **four** pupils to solve the problem.

Answer: _____ minutes [3]

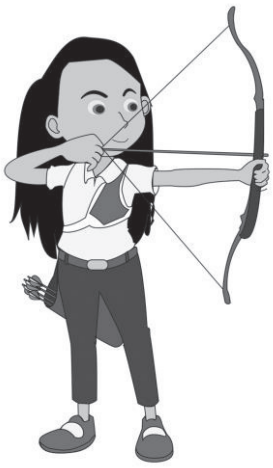
Marks

43. Rina, Lucy and Ann took part in an archery game.
They scored an **average** of 600 points in the game.
Rina scored 360 points.
Lucy scored **half** the number of points which Ann scored.

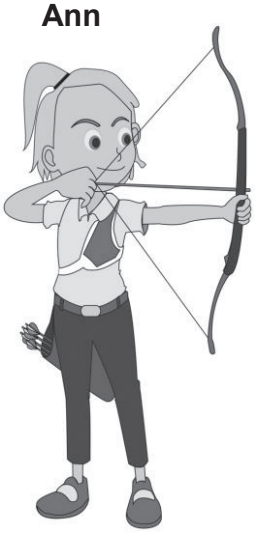
How many points did **Ann** score?

Rina

Lucy



Ann



Answer: _____ points [5]

Marks

44. The rice found in a sack of rice is used to make both small and large packets of rice.

One sack of rice gives

<u>either</u> 4 small packets of rice **and** 2 large packets of rice,

<u>or</u> 8 small packets of rice **and** 1 large packet of rice.

One small packet of rice contains 1.25 kg of rice.

Calculate the mass of rice in one sack of rice.

Answer: _____ kg [4]

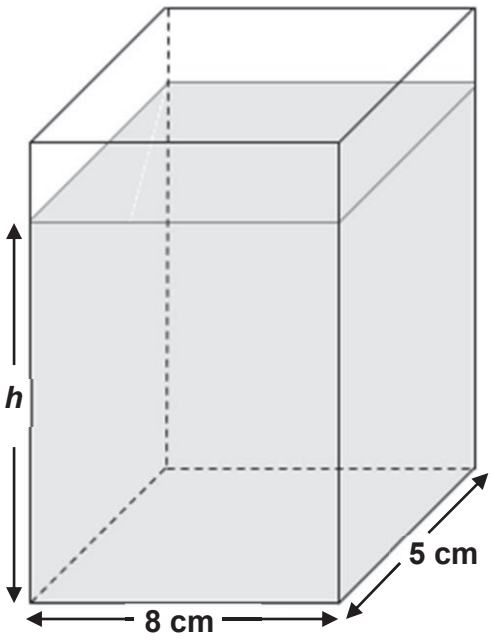
45. The diagram below shows two containers, **Container A** and **Container B**.

One litre of water is distributed between the two containers so that the height of water, ***h***, in the containers is the **same**.

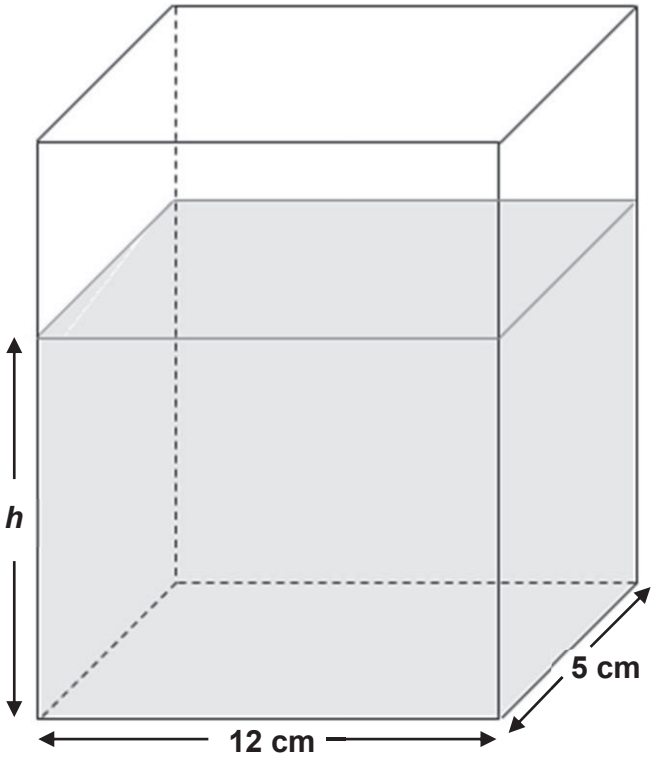
Calculate the height of water, ***h***.

[1 litre = 1000 cm^3]

Container A



Container B



Answer: _____ cm [4]

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