

Nanyang Primary School
Primary 5
Mathematics
Term 2 Weighted Assessment

Name: _____ ()

Marks:

/20

Class: Primary 5 ()

Date: _____

Parent's Signature: _____

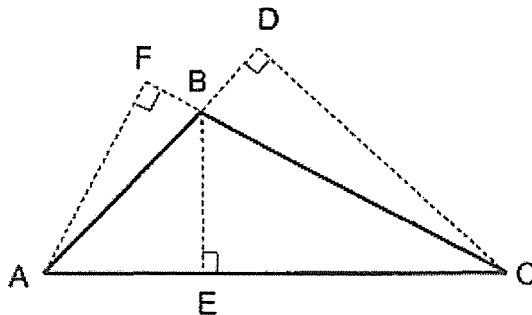
Duration: 45 minutes

The use of an approved calculator is allowed.

Please sign and return the examination paper the next day. Any queries should be raised at the same time when returning paper.

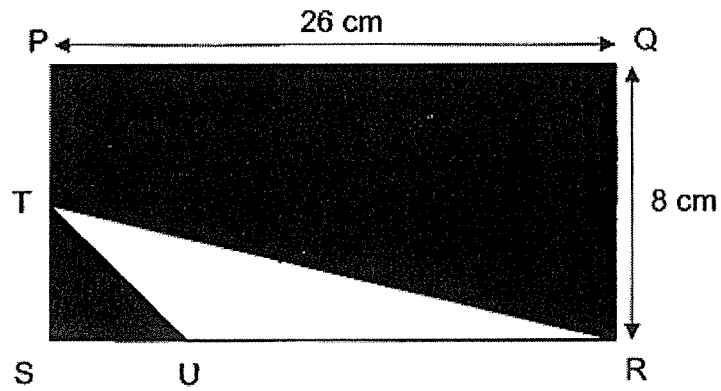
Questions 1 to 2 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (4 marks)

- 1 In the figure below, ABC is a triangle. FBC and ABD are straight lines. Name the base of triangle ABC given its height is AF.



Ans: _____

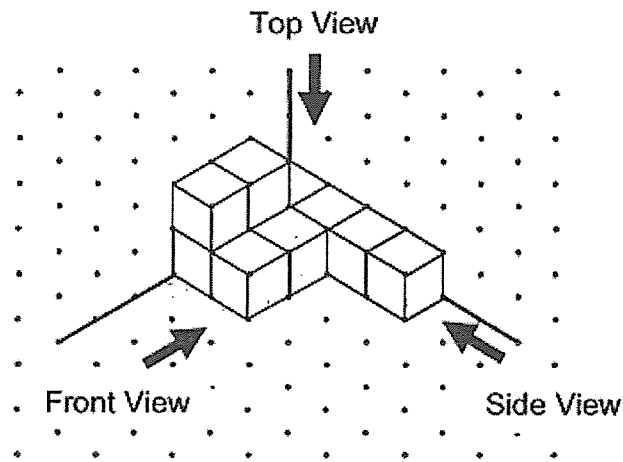
- 2 In the figure below, PQRS is a rectangle. T is the midpoint of PS. U is a point on SR. $TS = SU$, $PQ = 26$ cm and $QR = 8$ cm. Find the total area of the shaded parts.



Ans: _____ cm^2

For questions 3 to 6, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. (16 marks)

3 The figure below shows a solid made up of 1-cm cubes.



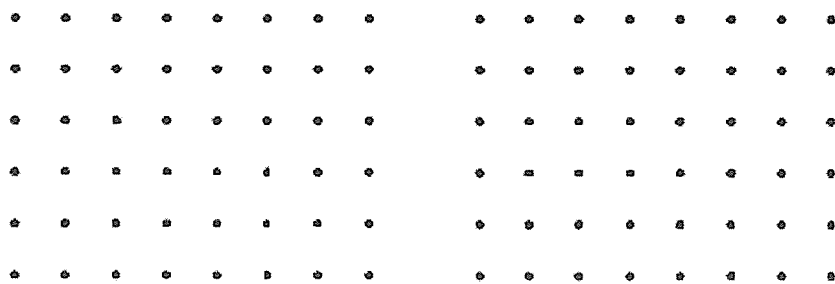
(a) How many more 1-cm cubes does Peter need to add to the solid to make it into a 4-cm cube?

Ans: (a) _____ [1]

(b) Draw the front view and the side view of the solid on the grids below.

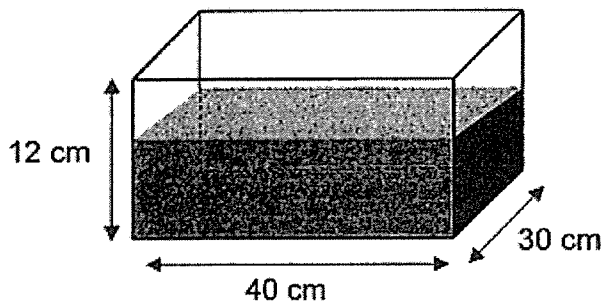
Front View

Side View

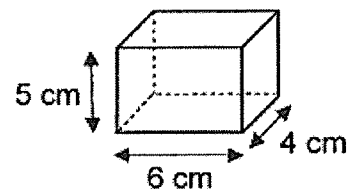


[2]

- 4 A rectangular tank measuring 40 cm by 30 cm by 12 cm is $\frac{3}{4}$ - filled with water. Rajan poured water from the rectangular tank into identical empty containers to the brim until the rectangular tank became $\frac{1}{3}$ - filled with water. Each container was 6 cm long, 4 cm wide and 5 cm high.



Rectangular tank



Container

- (a) What was the volume of water in the rectangular tank when it was completely filled with water?

Ans: (a) _____ [1]

- (b) How many such containers were completely filled with water?

Ans: (b) _____ [3]

5 The mass of a box with 40 identical markers is 1640 g.

(a) What is the mass of 40 such markers including the box in kilograms?

Ans: (a) _____ [1]

(b) The mass of the same box when filled with 20 identical pens is 0.83 kg. The mass of one such marker is twice the mass of one such pen. What is the mass of the empty box in kilograms?

Ans: (b) _____ [3]

- 6 The table shows the prices of muffins and cookies at Marvel Cafe and Simply Cafe.

| Item | Marvel Cafe | Simply Cafe |
|--------|-------------|-------------|
| Muffin | \$4.00 | \$3.20 |
| Cookie | \$1.60 | \$2.00 |

- (a) Mrs Lim bought 16 muffins and 20 cookies from Simply Cafe. How much did she pay in all?

Ans: (a) _____ [2]

- (b) John bought muffins and cookies from Marvel Cafe. Sally bought muffins and cookies from Simply Cafe. Both John and Sally bought the same number of muffins. John bought 5 cookies and Sally bought 8 cookies. They paid the same amount of money. How many muffins did each of them buy?

Ans: (b) _____ [3]

End of Paper



Marymount Primary School
 Primary 5
 Mathematics
 Term 2 Mid-Year Assessment

Name: _____ ()
 Class: Primary 5 ()
 Date: _____
 Duration: 45 minutes

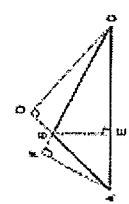
Parent's Signature: _____

Mark: /20

The use of an approved calculator is allowed.
 Please sign and return the declaration paper the next day. Any
 queries should be raised at the same time when returning paper.

Question 1 is 2 mark 2 equal each. Show your working clearly and write your
 answers in the spaces provided. For questions which require units, give your
 answers in the unit stated. (4 marks)

1. In the figure below, ABC is a triangle. PBC and ABC are right-angled
 triangles. The length of segment PC is 10 cm. Find the length of AC.



Ans: 30

5. The mass of a box with 45 identical packets is 1040 g.
 (a) What is the mass of 45 such packets if they are in bags?

$$1040 \div 45 = 23.11$$

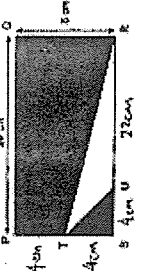
Ans: 1040 g

| | | |
|-----|------|--------|
| Box | 200g | 0.99kg |
| Box | 100g | 1.4kg |

Answers in grams
 mass of 1 packet = mass of 2 pens
 mass of 40 packets = mass of 80 pens
 $80 \times 20 = 1600$
 mass of 40 pens = 1600g = 1.6kg = 0.8kg
 mass of 80 pens = 0.8kg
 mass of empty box = 0.8kg + 0.27kg
 = 1.07kg

Ans: 1040 g

2. In the figure below, PQRS is a rectangle. T is the midpoint of PR. U is a point on ST such that TU = 25 cm and QU = 2 cm. Find the area of the shaded region.



$$UR = 26 \text{ cm}$$

$$UR = 27 \text{ cm}$$

$$\text{Area of } \triangle TQR = \frac{1}{2} \times 26 \times 4 = 52 \text{ cm}^2$$

$$= 44 \text{ cm}^2$$

$$\text{Area of PQRS} = 26 \times 8 = 208 \text{ cm}^2$$

$$\text{Area of shaded area} = 208 - 44 = 164 \text{ cm}^2$$

Ans: 164

3. The table shows the prices of muffins and cookies at Harvest Cafe and Spry's Cafe.

| | Muffin | Cookie |
|--------------|--------|--------|
| Harvest Cafe | \$1.20 | \$1.50 |
| Spry's Cafe | \$1.50 | \$1.80 |

- (a) Mrs Lim bought 18 muffins and 20 cookies from Spry's Cafe. How much did she pay for it?
 $18 \times \$1.50 = \27.00
 $20 \times \$1.80 = \36.00
 $\$27.00 + \$36.00 = \$63.00$

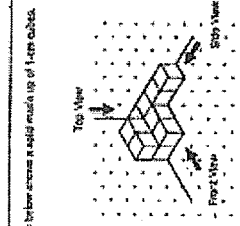
- (b) John bought muffins and cookies from Harvest Cafe. Sally bought 16 muffins and 20 cookies from Harvest Cafe. They bought the same amount of muffins and cookies. How much more money did Sally spend than John? They paid the same amount of money. How many muffins did John buy?

| | | |
|-------|------------|---------|
| John | 18 muffins | \$21.60 |
| Sally | 16 muffins | \$24.00 |

Costs bought by John $\rightarrow 5 \times \$1.50 = \7.50
 Costs bought by Sally $\rightarrow 8 \times \$2.00 = \16
 Difference in cost spent on muffins $\rightarrow \$16 - \$7.50 = \$8.50$
 Difference in muffin prices = \$1 - \$1.20 = \$0.80
 Number of muffins = \$8.50 / \$0.80 = 10

Ans: (a) \$63.00

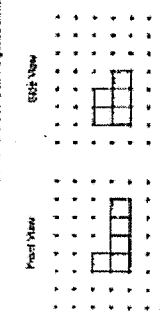
4. How many more 1-cm cubes does Peter need to add to the solid to make a 4 cm x 4 cm cube?



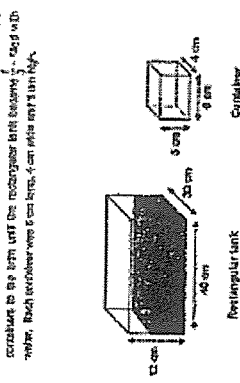
$$4 \times 4 \times 4 = 64$$

$$64 - 10 = 54$$

- (b) Draw the front view and the side view of the solid on the grid below.



4. A rectangular tank measuring 40 cm by 30 cm by 15 cm is 3/4 full with water. How many more litres of water must be added to fill the tank completely? (1 mark)



$$40 \text{ cm} \times 30 \text{ cm} \times 15 \text{ cm} = 18000 \text{ cm}^3$$

$$18000 \times \frac{3}{4} = 13500 \text{ cm}^3$$

$$18000 - 13500 = 4500 \text{ cm}^3 = 4.5 \text{ litres}$$

- (b) How many such containers were completely filled with water?

$$\frac{3}{4} = \frac{1}{2} = \frac{1}{2}$$

$$\frac{1}{2} \times 14400 \text{ cm}^3 = 7200 \text{ cm}^3$$

$$7200 \text{ cm}^3 \div 1200 \text{ cm}^3 = 6$$

Ans: 6

