

Nanyang Primary School
Primary 5
Mathematics
Term 2 Weighted Assessment

Name: _____ ()

Marks:

/20

Class: Primary 5 ()

Date: _____

Parent's Signature: _____

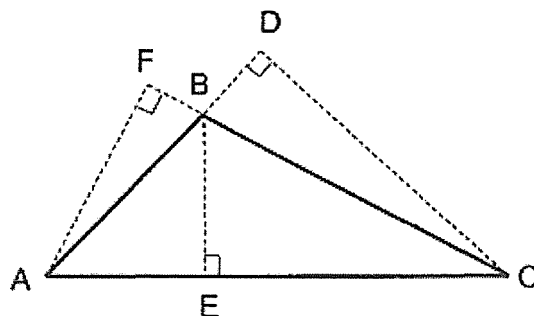
Duration: 45 minutes

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.

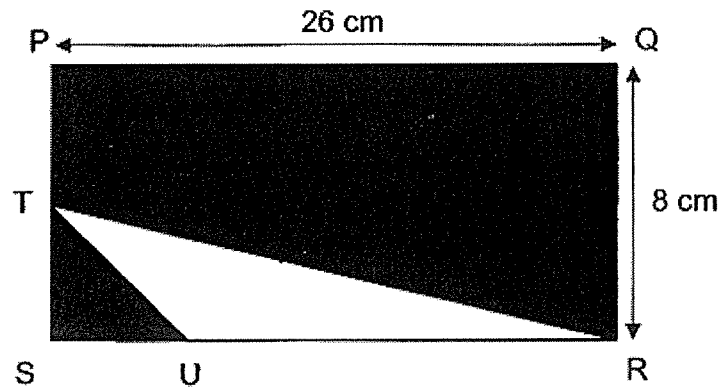
Questions 1 to 2 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (4 marks)

- 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: _____

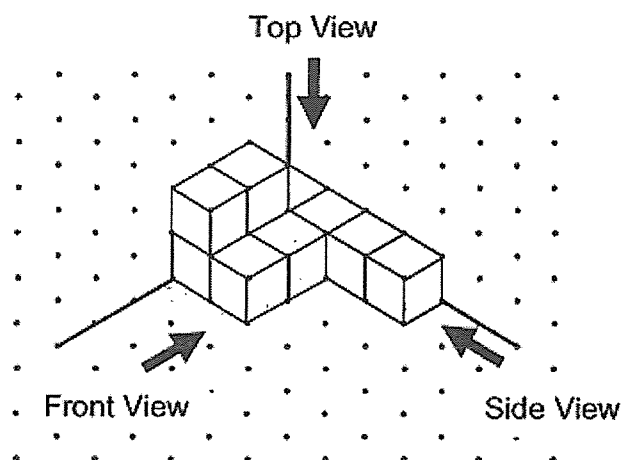
- 2 In the figure below, PQRS is a rectangle. T is the midpoint of PS. U is a point on SR. $TS = SU$, $PQ = 26$ cm and $QR = 8$ cm. Find the total area of the shaded parts.



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.

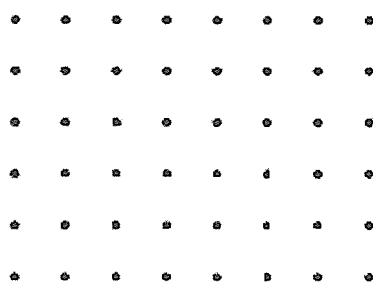


- (a) How many more 1-cm cubes does Peter need to add to the solid to make it into a 4-cm cube?

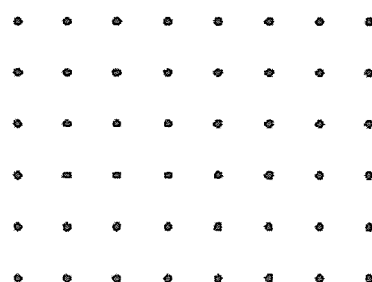
Ans: (a) _____ [1]

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

Front View

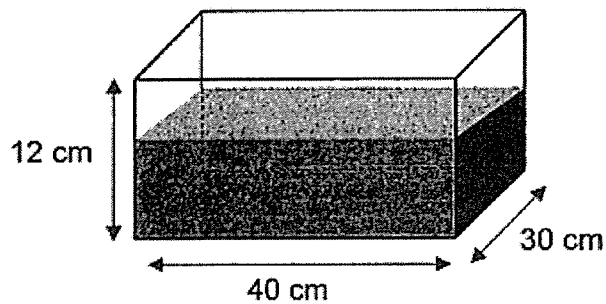


Side View

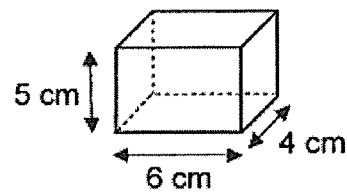


[2]

- 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

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

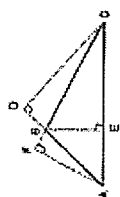
Parent's Signature: _____

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Please sign and return the declaration below the seal day. Any queries should be raised at the same time when returning paper.

Consider the 2 empty cubes. Show your working clearly and write your answers in the spaces provided. For questions which require unit, 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 area of triangle ABC is 12 cm². Find the area of triangle PBC.



Area: BC

5. The mass of a box with 40 identical marbles is 1.64 kg.
(a) What is the mass of 40 such marbles if the box is empty?

$$1.64 \div 40 = 0.041$$

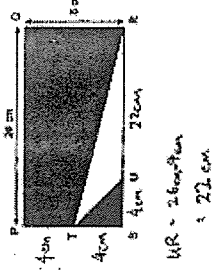
- (b) The mass of the same box when filled with 40 identical marbles is 1.64 kg. The mass of one such marble is 0.041 kg. What is the mass of the empty box?

Box	20 gms	40 gms	60 gms	80 gms	100 gms
Mass	0.99 kg	1.04 kg	1.09 kg	1.14 kg	1.19 kg

Answers in kg

Mass of 1 marble = mass of 2 pens
 mass of 40 marbles = mass of 80 pens
 $80 - 20 = 60$
 mass of 60 pens = $1.09 - 0.99$
 $= 0.10$
 mass of 20 pens = $0.10 \div 3 = 0.0333$
 mass of empty box = $0.99 - 0.0333 = 0.9567$

2. In the figure below, PQRS is a rectangle. T is the midpoint of PR. U is a point on SR such that TU is perpendicular to SR. Find the area of triangle TQR.



Area of $\triangle TQR = \frac{1}{2} \times 24 \times 4 = 48$
 $UR = 26 \text{ cm}$
 $UR = 26 \text{ cm}$
 Area of $\triangle PQRS = 26 \times 8 = 208$
 Area of shaded area = $208 - 48 = 160$

Area of shaded area = $208 - 48 = 160$

Area: 164

3. The table shows the prices of marbles and coins at Market One and Market Two.

	Market One	Market Two
Marble	\$1.20	\$1.50
Coin	\$0.80	\$1.00

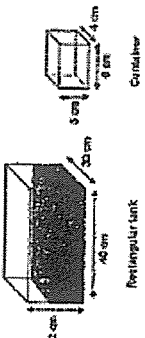
- (a) Mrs Lim bought 16 marbles and 20 coins from Market One. How much did she pay in all?
 $16 \times \$1.20 = \19.20
 $20 \times \$0.80 = \16.00
 $\$19.20 + \$16.00 = \$35.20$

- (b) John bought marbles and coins from Market One. Sally bought marbles and coins from Market Two. They both paid the same amount of money. They bought 8 marbles each. How many coins did each of them buy?

	John	Sally
Marble	8	8
Coin	16	16

Cost of 8 marbles = $8 \times \$1.20 = \9.60
 Cost of 16 coins = $16 \times \$0.80 = \12.80
 Difference = $\$12.80 - \$9.60 = \$3.20$
 Difference = marble price = $\$3.20$
 Number of marbles = $\$3.20 \div \$0.80 = 4$

4. A rectangular tank measuring 40 cm by 30 cm by 10 cm is $\frac{3}{4}$ full of water. John poured water from the rectangular tank into a smaller rectangular tank. The two tanks are identical. How much water is left in the larger tank?



- (a) What was the volume of water in the rectangular tank when it was completely full?
 $40 \text{ cm} \times 30 \text{ cm} \times 10 \text{ cm} = 12000 \text{ cm}^3$
 Area: 12000

- (b) How many such containers were completely full with water?
 $\frac{3}{4} \times 12000 = 9000$
 $\frac{9000}{12000} = \frac{3}{4}$
 $12000 \div \frac{3}{4} = 16000$
 Area: 16000

Area: 50

