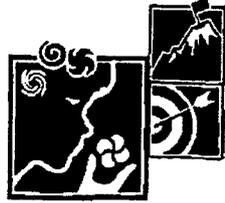


Nanyang Primary School  
Primary 5  
Mathematics  
Term 2 Weighted Assessment



Marks:
/20

Name: \_\_\_\_\_ ( )

Class: Primary 5 ( )

Date: \_\_\_\_\_

Parent's Signature: \_\_\_\_\_

Duration: 40 minutes

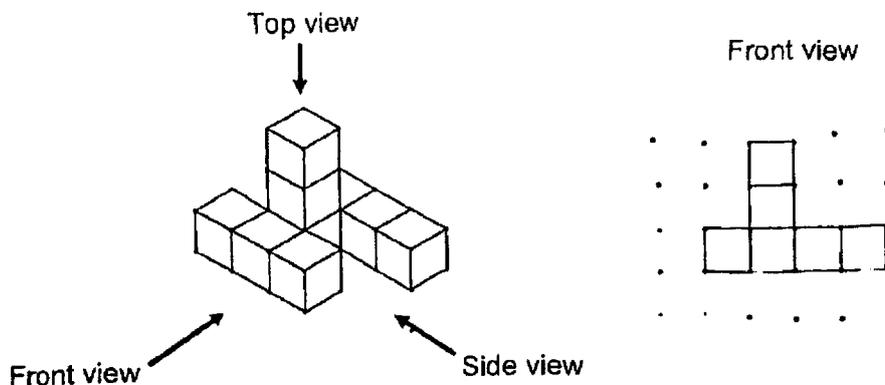
The use of an approved calculator is allowed.

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

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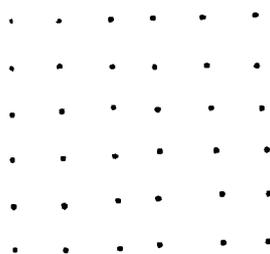
Questions 1 to 2 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (4 marks)

- 1 (a) Ali builds a solid using 9 unit cubes.



Draw the side view of the solid on the grid below.

Side view



- (b) Find the greatest number of unit cubes Ali can add to the solid without changing the front view and side view.

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

- 2 Jack had some marbles at first. He sold  $\frac{1}{5}$  of the marbles. He then gave  $\frac{5}{8}$  of the remaining marbles to his sister. He had 360 marbles left in the end. How many marbles did he have at first?

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

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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)

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3 Anna had  $\frac{7}{8}$  kg of flour at first. She used  $\frac{3}{7}$  of the flour to bake a cake.

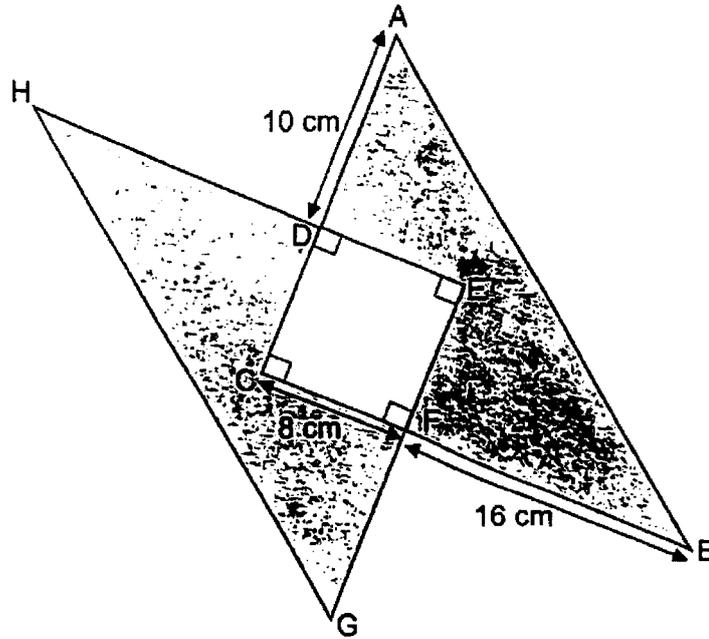
Bob used  $\frac{1}{4}$  kg of flour more than Anna. How much flour did Bob use?

Give your answer in kg.

Ans: \_\_\_\_\_ kg [3]

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- 4 The figure below is formed by 2 identical triangles, ABC and GHE. Two such triangles are glued together such that they overlap as shown below. CDEF is a square of side 8 cm.



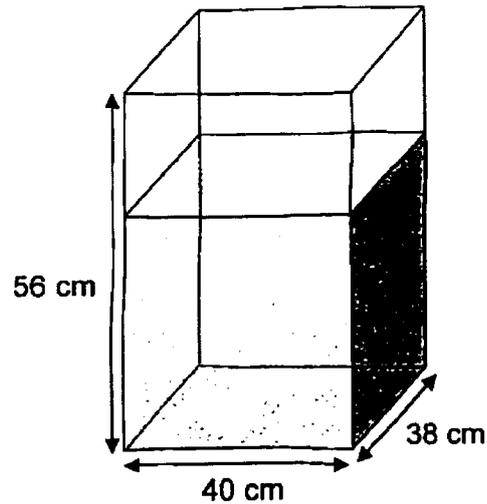
(a) Find the area of triangle ABC.

Ans: (a) \_\_\_\_\_ cm<sup>2</sup> [2]

(b) Find the total area of the shaded parts of the figure.

Ans: (b) \_\_\_\_\_ cm<sup>2</sup> [2]

- 5 The figure below shows a rectangular tank. It was  $\frac{5}{7}$  - filled with water at first.



- (a) How much water was in the tank at first?

Ans: (a) \_\_\_\_\_  $\text{cm}^3$  [2]

- (b) Syakir poured the water from the tank to completely fill as many empty bottles as possible. The capacity of each bottle was  $225 \text{ cm}^3$ . How much water was left in the tank in the end?

Ans: (b) \_\_\_\_\_  $\text{cm}^3$  [2]

- 6 At an amusement park,  $\frac{1}{3}$  of the visitors were children.  $\frac{1}{6}$  of the children were boys and  $\frac{1}{4}$  of the adults were men. There were 196 men and boys altogether.

(a) How many visitors were there at the amusement park?

Ans: (a) \_\_\_\_\_ [3]

- (b) After some children went home, there were three times as many adults as children left at the amusement park. How many children went home?

Ans: (b) \_\_\_\_\_ [2]

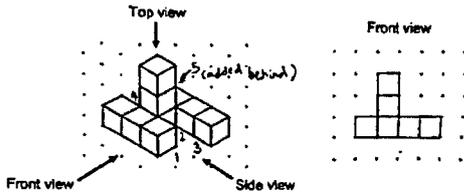
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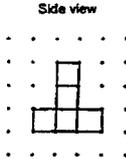


Questions 1 to 2 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (4 marks)

- 1 (a) Ali builds a solid using 9 unit cubes.



Draw the side view of the solid on the grid below.



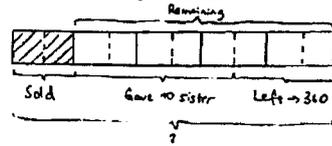
- (b) Find the greatest number of unit cubes Ali can add to the solid without changing the front view and side view.

(See diagram for the 5 added cubes)

Ans: 5

2

- 2 Jack had some marbles at first. He sold  $\frac{1}{5}$  of the marbles. He then gave  $\frac{5}{8}$  of the remaining marbles to his sister. He had 360 marbles left in the end. How many marbles did he have at first?



$$3 \text{ units} = 360$$

$$1 \text{ unit} = 360 \div 3 = 120$$

$$10 \text{ units} = 120 \times 10 = 1200 \text{ (ans)}$$

Alternative method

$$1 - \frac{1}{5} = \frac{4}{5} \rightarrow \text{Fraction of marbles at first remaining}$$

$$\frac{10}{10} \text{ of marbles at first} \rightarrow 120 \times 10 = 1200 \text{ (ans)}$$

$$1 - \frac{5}{8} = \frac{3}{8} \rightarrow \text{Fraction of remaining marbles left}$$

$$\frac{3}{8} \times \frac{4}{5} = \frac{2}{5} \rightarrow \text{Fraction of marbles at first left}$$

$$\frac{3}{10} \text{ of marbles at first} \rightarrow 360$$

$$\frac{1}{10} \text{ of marbles at first} \rightarrow 360 \div 3 = 1200$$

Ans: 1200

3

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 Anne had  $\frac{7}{8}$  kg of flour at first. She used  $\frac{3}{7}$  of the flour to bake a cake. Bob used  $\frac{1}{4}$  kg of flour more than Anne. How much flour did Bob use? Give your answer in kg.

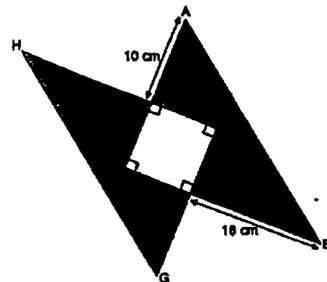
$$\text{Amount of flour Anne used} \rightarrow \frac{3}{7} \times \frac{7}{8} \text{ kg} = \frac{3}{8} \text{ kg}$$

$$\text{Amount of flour Bob used} \rightarrow \frac{3}{8} \text{ kg} + \frac{1}{4} \text{ kg} = \frac{5}{8} \text{ kg (ans)}$$

Ans:  $\frac{5}{8}$  kg [2]

4

- 4 The figure below is formed by 2 identical triangles, ABC and GHE. Two such triangles are glued together such that they overlap as shown below. CDEF is a square of side 8 cm.



- (a) Find the area of triangle ABC.

$$AC \rightarrow 10 + 8 = 18$$

$$BC \rightarrow 16 + 8 = 24$$

$$\text{Area of } \triangle ABC \rightarrow \frac{1}{2} \times 18 \times 24 = 216 \text{ (ans)}$$

Ans: (a) 216 cm<sup>2</sup> [2]

- (b) Find the total area of the shaded parts of the figure.

$$\text{Area of } CDEF \rightarrow 8 \times 8 = 64$$

$$\text{Area of } ADEFB \rightarrow 216 - 64 = 152$$

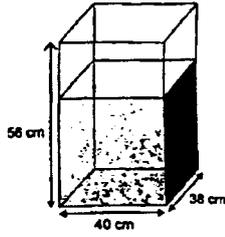
$$\text{Area of } GFCDH = \text{Area of } ADEFB$$

$$\text{Thus, area of shaded parts} \rightarrow 152 \times 2 = 304 \text{ (ans)}$$

Ans: (b) 304 cm<sup>2</sup> [2]

5

- 5 The figure below shows a rectangular tank. It was  $\frac{5}{7}$  filled with water at first.



- (a) How much water was in the tank at first?

$$\frac{5}{7} \times 56 \times 40 \times 38 = 60800 \text{ (ans)}$$

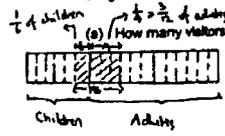
Ans: (a) 60800 cm<sup>3</sup> [2]

- (b) Syahr poured the water from the tank to completely fill as many empty bottles as possible. The capacity of each bottle was 225 cm<sup>3</sup>. How much water was left in the tank in the end?

$$\begin{aligned} 60800 &= 225 \times 270 \\ 270 \text{ bottles were filled completely} \\ 270 \times 225 &= 60750 \\ 60800 - 60750 &= 50 \text{ (ans)} \end{aligned}$$

Ans: (b) 50 cm<sup>3</sup> [2]

- 6 At an amusement park,  $\frac{1}{3}$  of the visitors were children.  $\frac{1}{6}$  of the children were boys and  $\frac{1}{4}$  of the adults were men. There were 196 men and boys altogether.



- (a) How many visitors were there at the amusement park?

$$\begin{aligned} \frac{1}{3} \times \frac{1}{6} &= \frac{1}{18} \rightarrow \text{Fraction of visitors that were boys} \\ \frac{1}{3} \times \frac{2}{3} &= \frac{2}{9} \rightarrow \text{Fraction of visitors that were girls} \\ \frac{1}{4} \times \frac{2}{3} &= \frac{1}{6} \rightarrow \text{Fraction of visitors that were men} \\ \frac{1}{4} \times \frac{3}{4} &= \frac{3}{16} \rightarrow \text{Fraction of visitors that were women} \\ \frac{1}{18} + \frac{2}{9} &= \frac{1}{18} + \frac{4}{18} = \frac{5}{18} \rightarrow \text{Fraction of visitors that were boys and girls} \\ \frac{5}{18} \times 196 &= 544 \text{ (ans)} \\ \frac{1}{3} \times 196 &= 65 \frac{2}{3} \rightarrow \text{Number of children} \\ 196 - 65 \frac{2}{3} &= 130 \frac{1}{3} \rightarrow \text{Number of adults} \\ \frac{1}{4} \times 130 \frac{1}{3} &= 32 \frac{5}{12} \rightarrow \text{Number of men} \\ 130 \frac{1}{3} - 32 \frac{5}{12} &= 97 \frac{1}{4} \rightarrow \text{Number of women} \end{aligned}$$

Ans: (a) 882 [2]

- (b) After some children went home, there were three times as many adults as children left at the amusement park. How many children went home?

$$\begin{aligned} \text{Number of adults} &\rightarrow \frac{2}{3} \times 882 = 588 \\ \text{Number of children at the end} &\rightarrow 588 \div 3 = 196 \\ \text{Number of children at first} &\rightarrow \frac{1}{3} \times 882 = 294 \\ 294 - 196 &= 98 \text{ (ans)} \end{aligned}$$

End of Paper