

Tao Nan School
Primary 5 End-Of-Year Mathematics Examination 2007

Name : _____ ()

Date : 26th October 2007

Class : P5 ()

Time : 8.00 a.m. – 10.15 a.m.

Parent's Signature : _____

Marks : _____ / 100

SECTION A (20 marks)

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet.

1) In 8 913 452, the digit 9 stands for _____.

- (1) 9 000
- (2) 90 000
- (3) 900 000
- (4) 9 000 000

2) Find the value of 7000×90 .

- (1) 160 000
- (2) 790 000
- (3) 630 000
- (4) 970 000

3) Which of the following is closest to 6 km?

- (1) 6.19 km
- (2) 5.91 km
- (3) 6.009 km
- (4) 5.908 km

4) Express 0.21 as a percentage.

- (1) 21%
- (2) 2.1%
- (3) 0.21%
- (4) 0.021%

5) The area of a rectangular field is 96 m^2 . If the breadth is 8 m, find its length.

- (1) 88 m
- (2) 40 m
- (3) 20 m
- (4) 12 m

6) Which of the following is **not** a property of a parallelogram?

- (1) There are two pairs of parallel lines.
- (2) The opposite sides are of equal length.
- (3) The sum of the interior angles is 270°
- (4) The opposite sides are parallel.

7) $187 \times 77 = 187 \times \underline{\hspace{2cm}} \times 7.7$

- (1) 0.01
- (2) 0.1
- (3) 10
- (4) 100

8) The average cost of 8 books is \$6.40. What is the total cost of the books?

- (1) \$0.80
- (2) \$1.60
- (3) \$14.40
- (4) \$51.20

9) In a movie theatre, $\frac{5}{9}$ of the audience is men, $\frac{3}{4}$ of the remainder is women and the rest are children. What fraction of the audience is children?

(1) $\frac{4}{9}$

(2) $\frac{1}{3}$

(3) $\frac{1}{4}$

(4) $\frac{1}{9}$

10) There are 105 members in an art club. 60% of them are girls. How many boys are there?

(1) 65

(2) 45

(3) 63

(4) 42

11) What is the value of $48 + (6 + 2 \times 3) \times 5$?

(1) 10

(2) 20

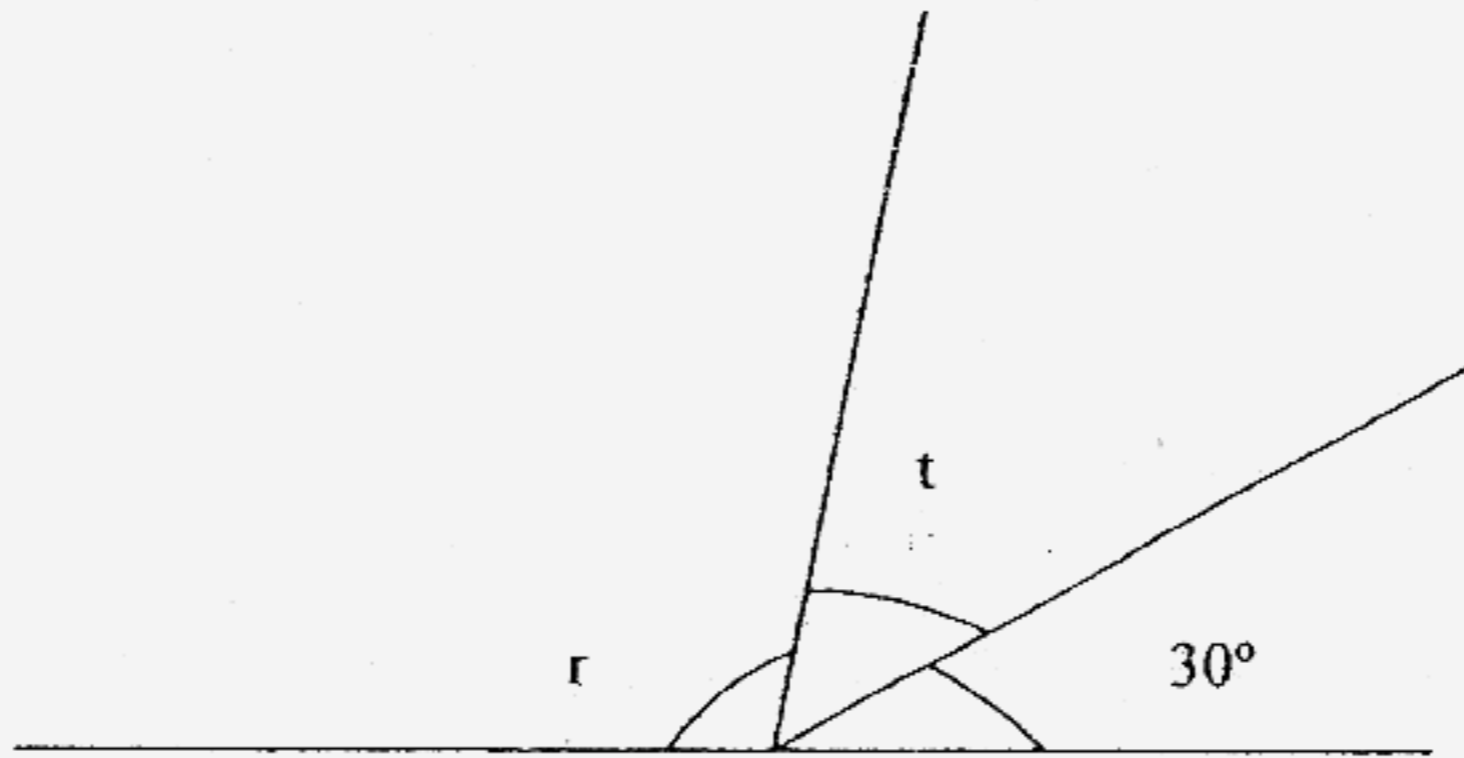
(3) 38

(4) 120

12) In an egg farm, 5 out of every 45 eggs are spoilt. What is the ratio of the number of good eggs to the number of bad eggs?

- (1) 1 : 9
- (2) 9 : 1
- (3) 1 : 8
- (4) 8 : 1

13) $\angle r$ is twice that of $\angle t$. Find the value of $\angle r$.



- (1) 50°
- (2) 75°
- (3) 100°
- (4) 150°

14) Which one of the following shapes can be tessellated?

(1)



(2)



(3)



(4)



15) Arrange the following fractions in ascending order.

$$\frac{6}{7}, \frac{11}{12}, \frac{3}{4}, \frac{14}{15}$$

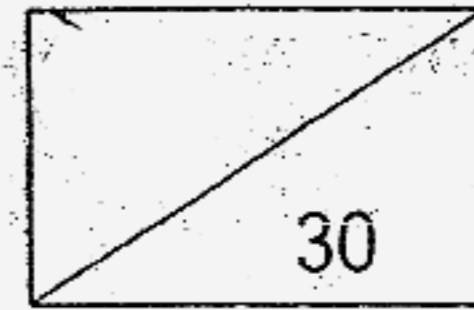
(1) $\frac{3}{4}, \frac{6}{7}, \frac{11}{12}, \frac{14}{15}$

(2) $\frac{3}{4}, \frac{11}{12}, \frac{6}{7}, \frac{14}{15}$

(3) $\frac{14}{15}, \frac{11}{12}, \frac{6}{7}, \frac{3}{4}$

(4) $\frac{11}{12}, \frac{6}{7}, \frac{3}{4}, \frac{14}{15}$

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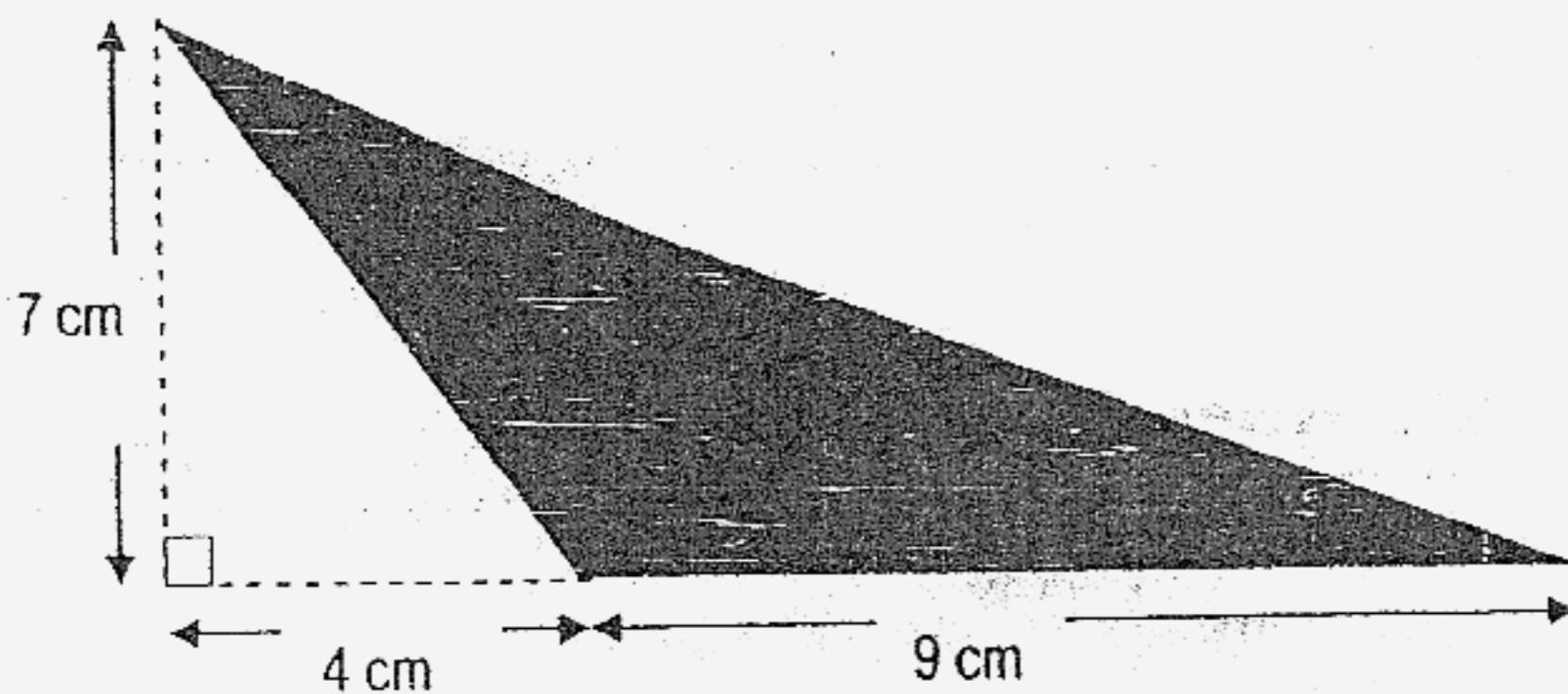
SECTION B (30 marks)

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

16) What is the value of $28 - (4 + 4) + 2 \times 3$?

Ans: _____

17) The triangle below is not drawn to scale. The area is _____ cm^2 .



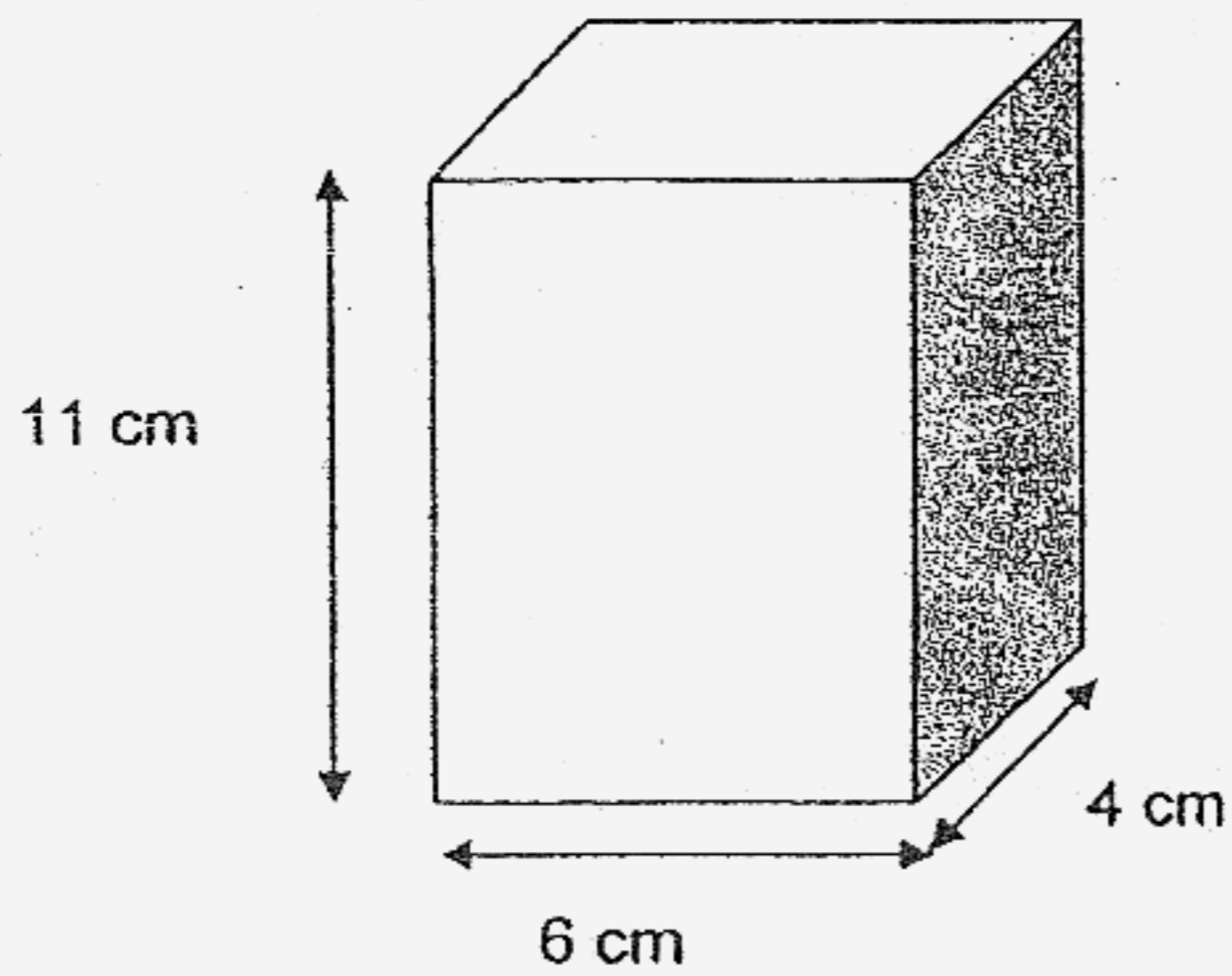
Ans: _____ cm^2

18) Find the product of 0.808 and 20.

Ans: _____

- 19) Alice cut a pizza into 13 equal slices. She then divided the slices equally among 5 children. How many slices of pizza did each child get? Express your answer in the simplest form.

- 20) What is the volume of the container below?

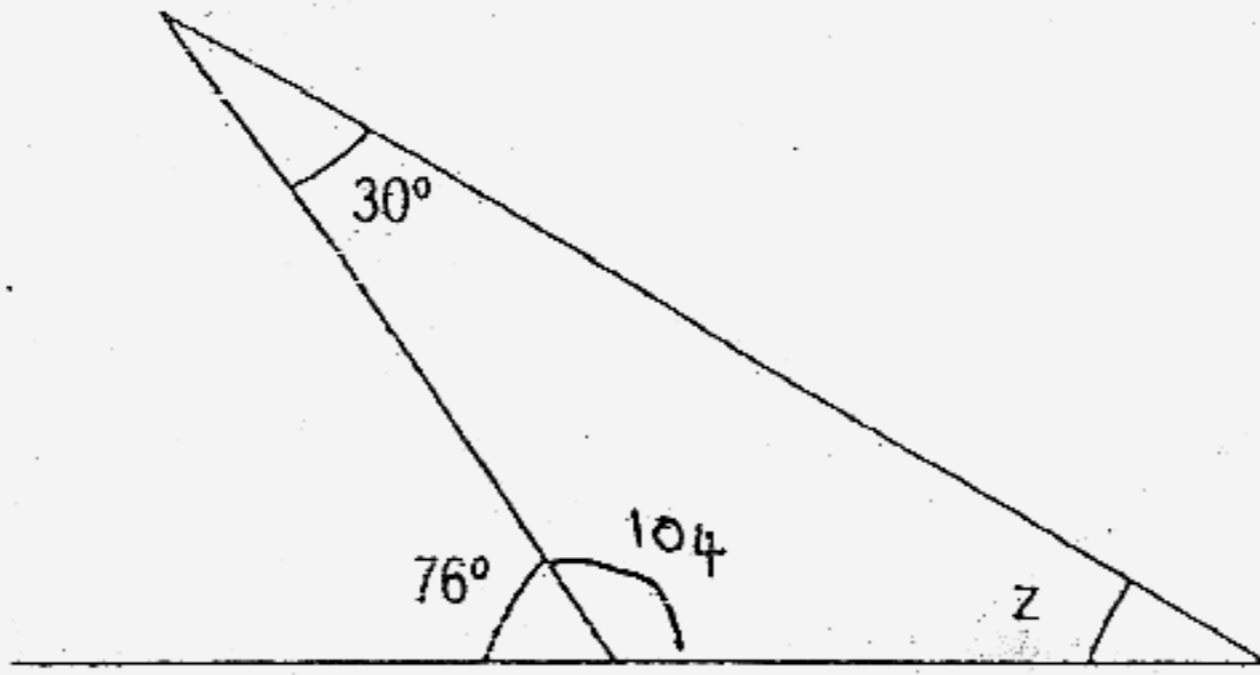


Ans: _____ cm³

- 21) Find the average of these numbers: 4, 48, 66 and 102

Ans:

- 22) The figure below is not drawn to scale. Find $\angle z$.

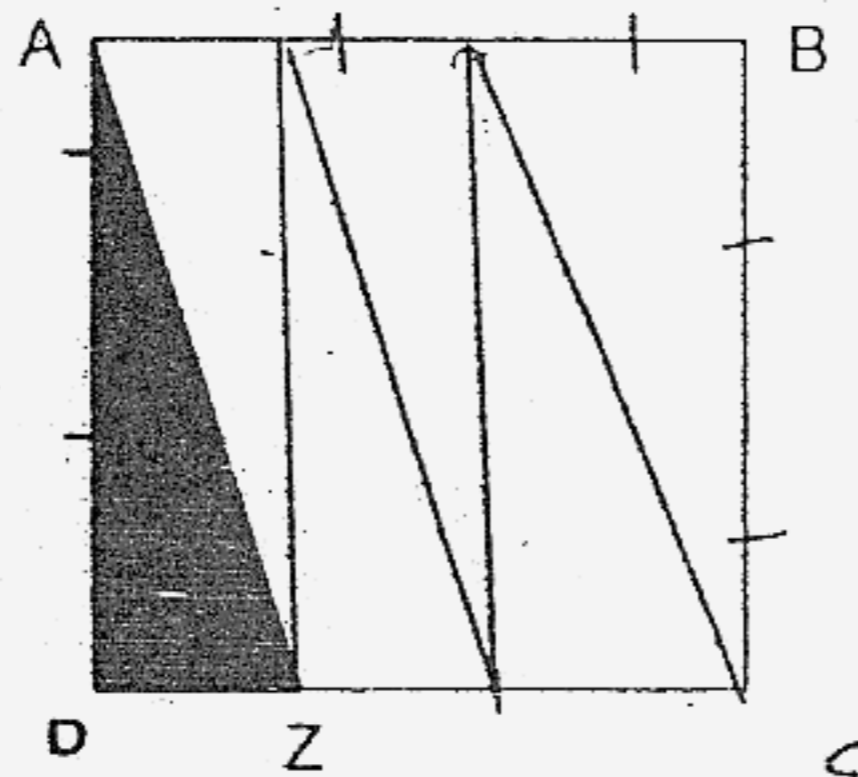


Ans: _____^o

- 23) Form the **largest possible even number** using the digits 1, 2, 7, 8 and 9.

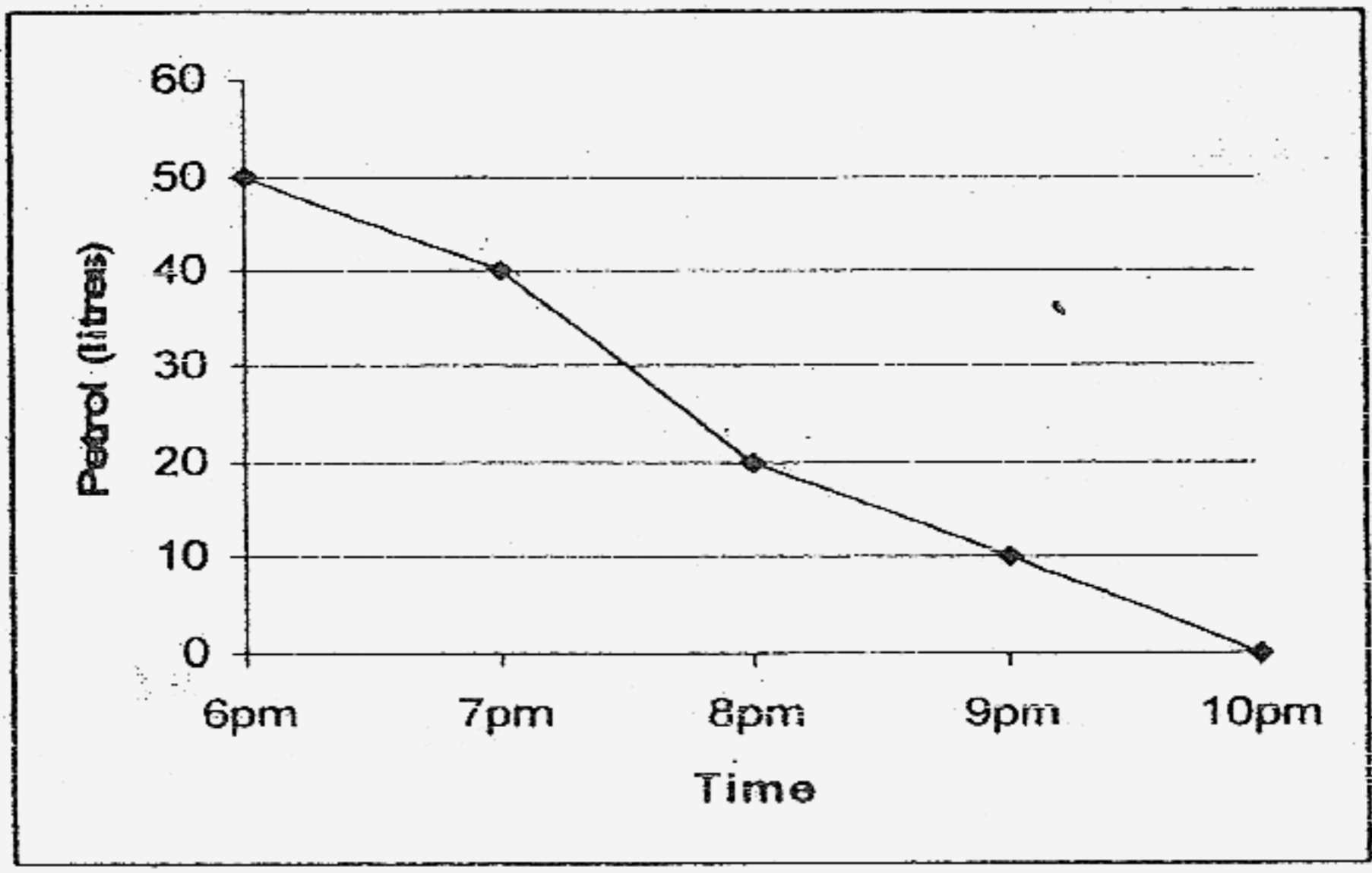
Ans: _____

- 24) ABCD is a square. The length of CD is 3 times that of ~~CZ~~.
What fraction of the square is shaded?



Ans: _____

25) The line graph below shows the amount of petrol in a car on a certain day. Study the graph and answer the question below.



From 6 to 7 pm, what is the amount of petrol used?

Ans: _____ l

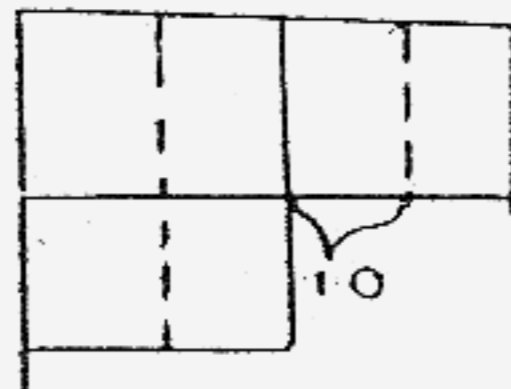
Questions 26 to 35 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

26) $99 \times 14 = 99 + 99 + 99 + 99 + \underline{\hspace{2cm}} \times 99$

The missing number in the blank is .

Ans:

27) $\frac{3}{4}$ of a number is greater than $\frac{1}{2}$ of the number by 10.
What is the number?



Ans:

28) Rachel is 3 times as old as Liyana. What is the ratio of Rachel's age to Liyana's age?

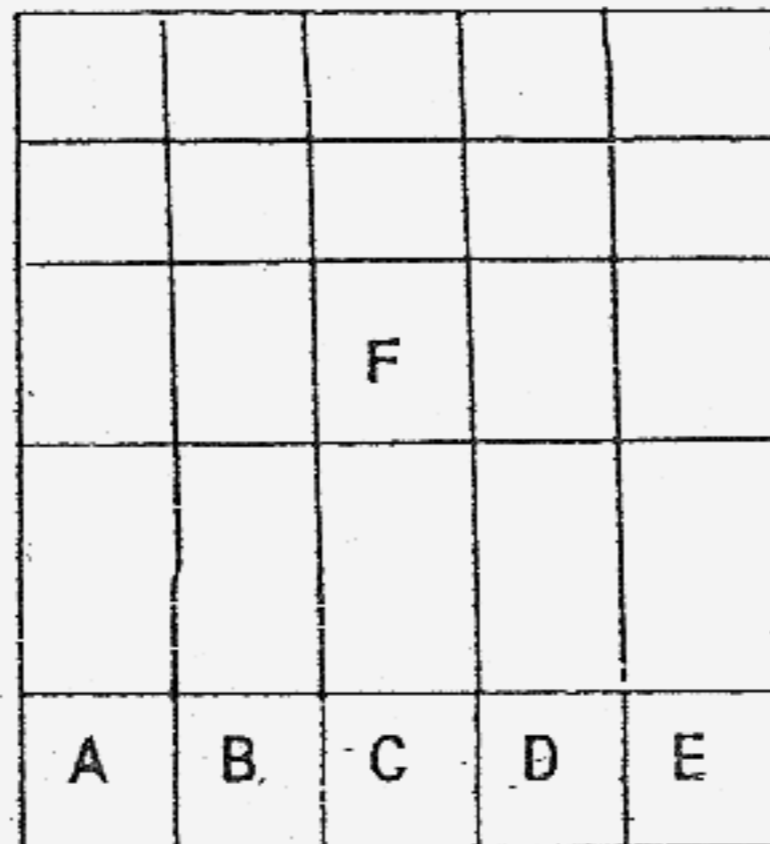
3:1

Ans:

- 29) Halimah had 200 blue and yellow roses. 25% of the roses were blue. She then bought some more blue roses and the total number of roses is now 225. How many blue roses did she have now?

Ans: _____

- 30) The figure is made up of 6 squares A, B, C, D, E and F. A, B, C, D and E are identical squares. What fraction of the figure is A and B?



Ans: _____

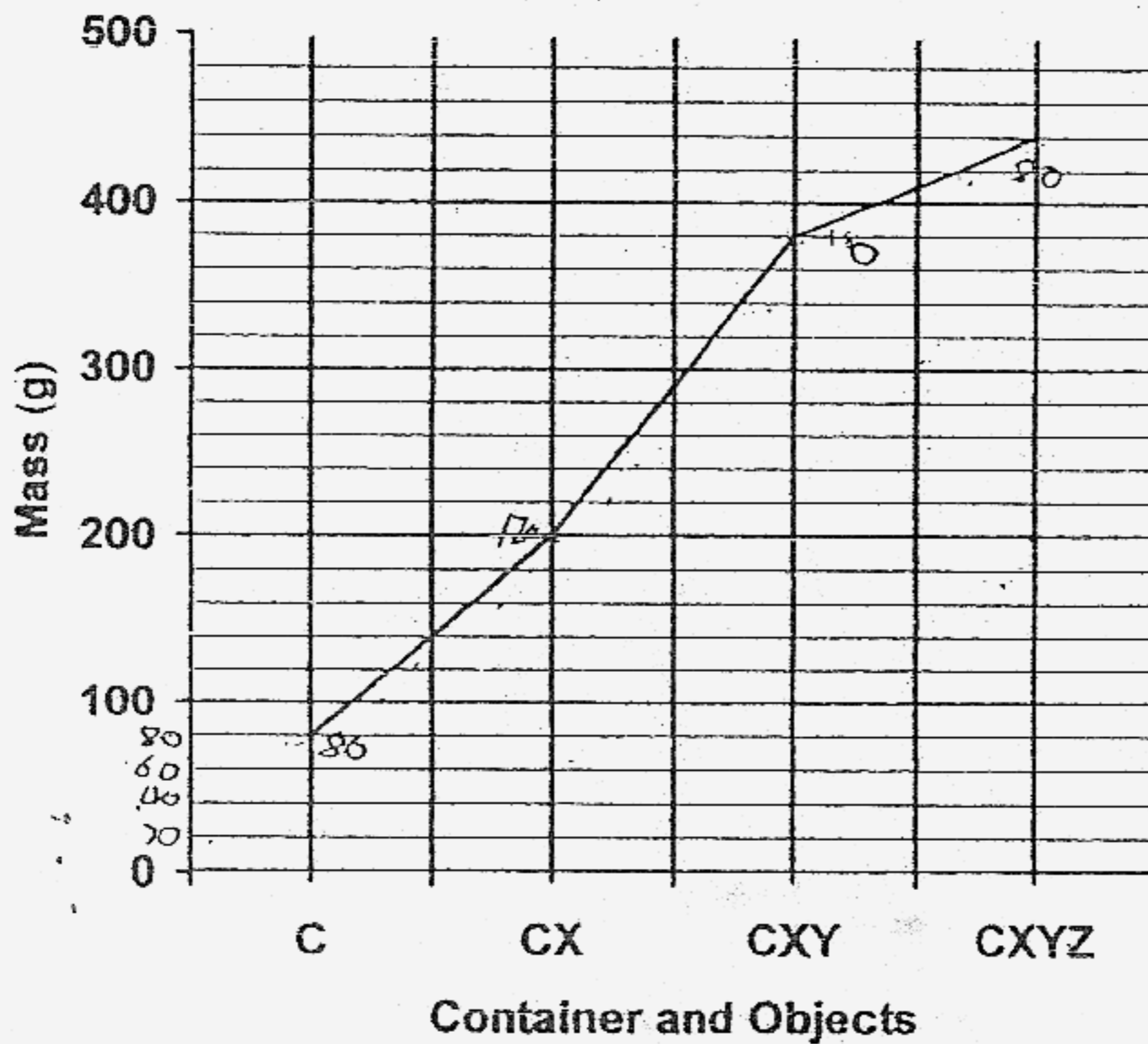
- 31) The time indicated on a clock is 3.05 a.m. Find the angle that the minute hand has to move through so that the time is 3.55 a.m.?

Ans: _____^o

- 32) A rectangular field has a perimeter of 96 m. The ratio of the length to the breadth is 5 : 3. Find the area of the field.

_____ m²

Study the graph below carefully and answer Question 33.



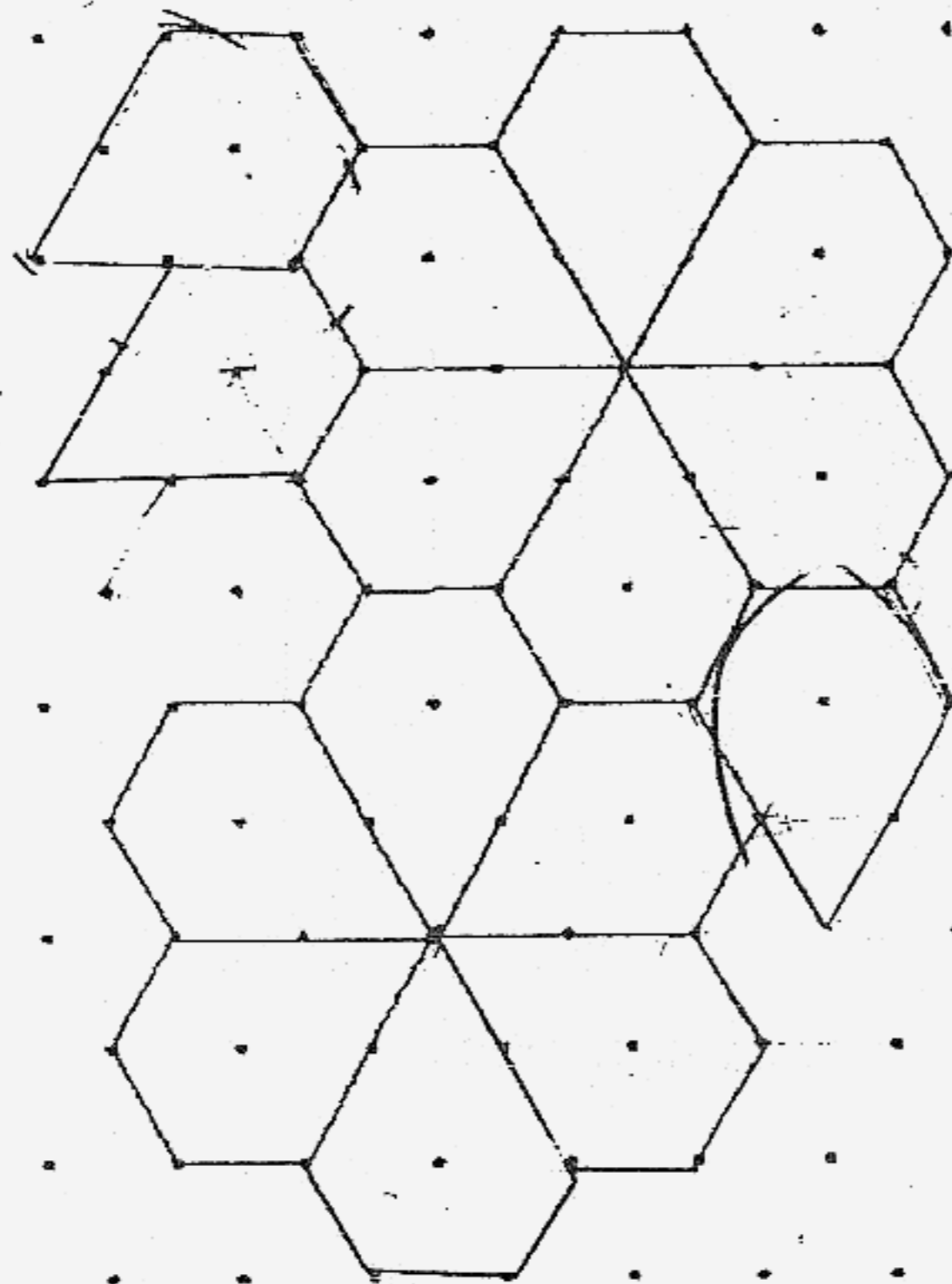
- 33) Three objects, X, Y and Z were placed in a Container C, one after another. The graph shows the mass of the container and objects. Name the object that is lighter than the container.

Ans: Object _____

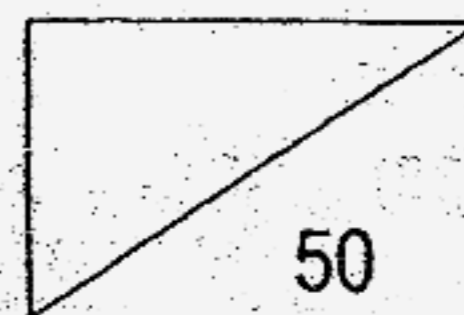
- 34) The sum of P and Q is 128 while the sum of Q and R is 96. If the total sum of P, Q and R is 164, find the value of Q.

Ans: _____

- 35) The pattern below shows part of a tessellation. Extend the tessellation by drawing 5 more unit shapes in the space provided.



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SECTION C (50 marks)

For questions 36 to 48, show your working clearly in the space below each question and write your answers in the spaces provided.

The number of marks available is shown in the brackets () at the end of each question or part-question.

- 36) A baking machine can bake 20 muffins in 10 minutes. At this rate, how long does this machine take to bake 48 muffins?

Ans: _____ (3m)

- 37) A book and 3 pens cost \$11.25. The book cost twice as much as a pen. Find the cost of 4 books.

Ans: _____ (3m)

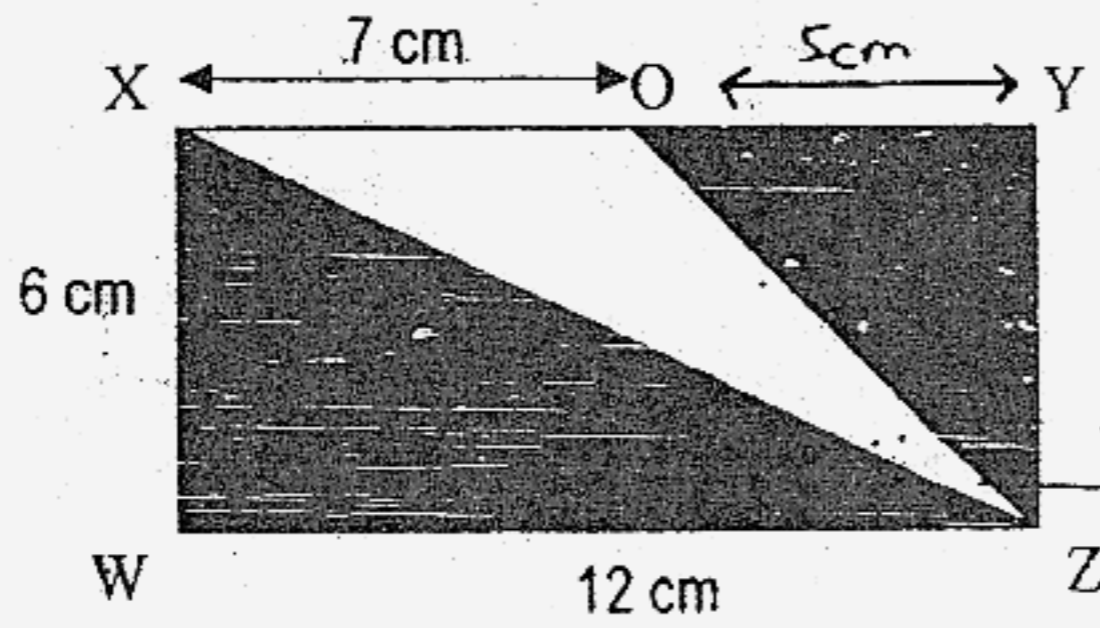
- 38) If Premila withdraws \$150 from her savings account, she will have \$450 left. What fraction of her savings should she withdraw so that she will have \$75 left? (Express your answer in the simplest form.)

Ans: _____ (3m)

- 39) There are some pigs, cows and goats in a farm. The ratio of the number of pigs to the number of cows is 3 : 4 . The ratio of the number of cows to the number of goats is 2 : 3 . What is the ratio of the number of pigs to the total number of animals in the farm?

Ans: _____ (3m)

- 40) WXYZ is a rectangle. Find the area of the shaded part.

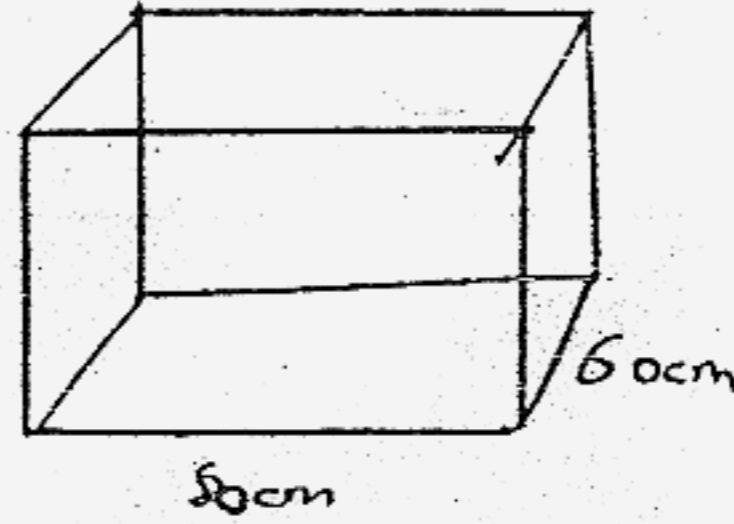


(3m)

- 41) Lily and Kumar had an equal number of marbles. After a game, Lily lost 20 of her marbles. Lily then had $\frac{1}{3}$ as many marbles as Kumar. How many marbles did each of them have at first?

Ans: _____ (3m)

- 42) A rectangular fish tank 80 cm long and 60 cm wide is filled with water from a tap which flows at a rate of 3ℓ per minute. If the tap is turned off after 40 minutes, what is the height of the water level in the container?
(1ℓ = 1000 cm³)

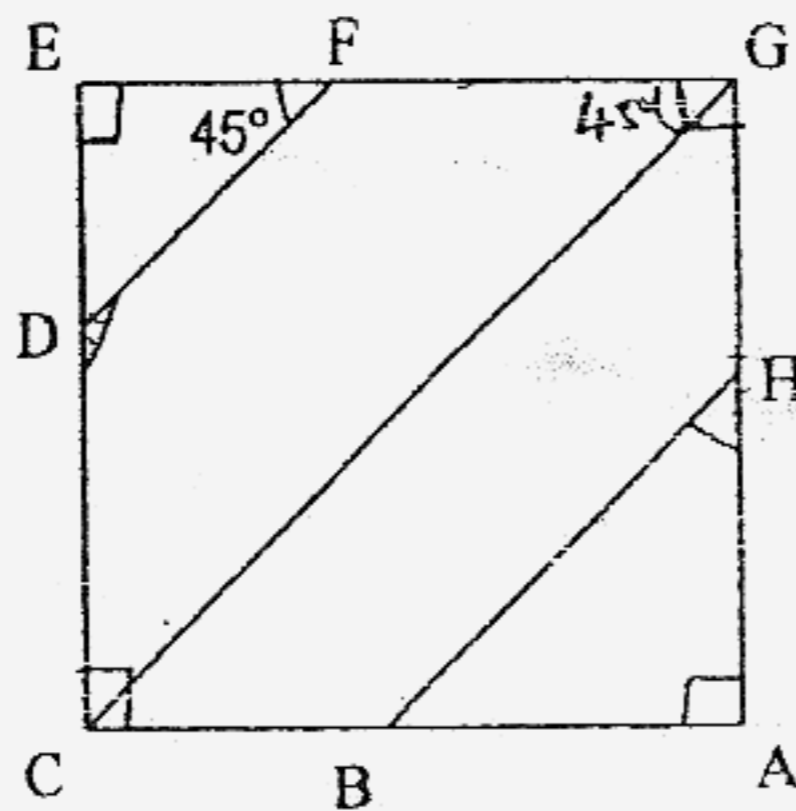


Ans: _____ (4m)

- 43) The ratio of Liling's money to Yingqi's money was 7 : 4 .
When Liling gave \$100 to Yingqi, the ratio became 5 : 6 .
How much money did Liling have at first?

Ans: _____ (4m)

- 44) ACEG is a square, not drawn to scale.
 Lines DF, CG and BH are parallel lines. $\angle EFD$ is 45° .
 Calculate (a) $\angle CDF$
 (b) $\angle AHB$



Ans: a) _____ (2m)

b) _____ (2m)

- 45) Kate has some stickers. If she gives her friends 7 stickers each, she will have 3 stickers left. If she gives them 8 stickers each, she will be short of 6 stickers.
- (a) How many friends does she have?
 - (b) How many stickers does she have?

Ans: a) _____ (3m)

b) _____ (2m)

46) The table below shows the rates of charges for water consumption.

First 5 m ³	\$1.50 per m ³
Next 5 m ³	\$1.75 per m ³
Every additional 1 m ³ or part thereof	\$2.00 per m ³

- (a) In the month of June, Family A used 18 m³ of water.
How much did Family A pay for their water bill?
- (b) Family A's water bill for July was \$48.25.
How much water was used?

Ans: a) _____ (2m)

b) _____ (3m)

47) Kathy had some pocket money. From the pocket money, she spent \$35 on food and \$65 on transport. After that, she spent $\frac{2}{7}$ of the remaining money on 5 books. As for the rest of her money, she gave $\frac{2}{5}$ of it to her cousin and had \$75 left.

(a) How much did each book cost?

(b) How much money did she have at first?

Ans: a) _____ (3m)

b) _____ (2m)

48) There are some eggs in 3 baskets, A, B and C. 20% of the number of eggs in A is equal to 10% of the number of eggs in B. The number of eggs in C is equal to 50% of the total number of eggs in A and B.

(a) Express the number of eggs in C as a fraction of the number of eggs in B. (Leave your answer in its simplest form.)

(b) If half of the eggs in B are taken out and placed into C, there will be 50 eggs in C. How many eggs are there in the 3 baskets?

Ans: a) _____ (2m)

b) _____ (3m)

Tao Nan Primary School

Primary 5 Maths SA2 Exam (2007)

Answer Keys

Q1	Q2	Q3	Q4	Q5
3	3	3	1	4
Q6	Q7	Q8	Q9	Q10
3	3	4	4	4
Q11	Q12	Q13	Q14	Q15
2	4	3	2	1

16. 16

17. $31\frac{1}{2}$

18. 16.160

19. $2\frac{3}{5}$

20. 264cm^3

21. 55

22. 46°

23. 98712

24. $\frac{1}{6}$

25. 10

26. 10

27. 40

28. 3 : 1

29. 75

30. $\frac{1}{15}$

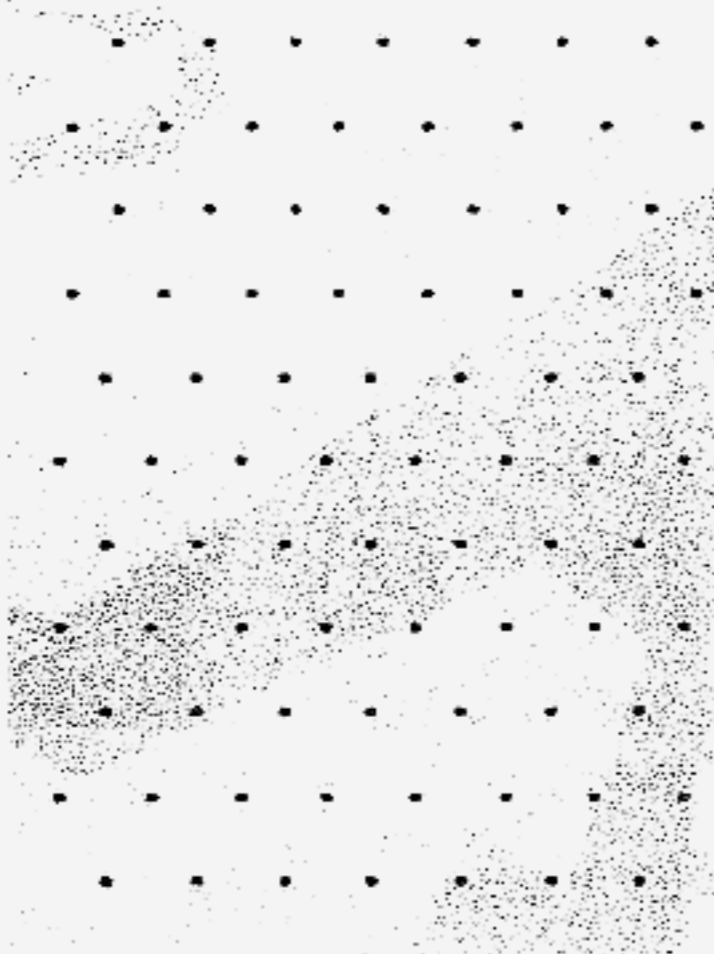
31. 300

32. 540°

33. 2

34. 60

35.)



36. $20 \div 10 = 2$
 $1 \text{ min} \longrightarrow 2 \text{ muffins}$
 $48 \div 2 = 24$
It will take this machine 24 minutes.

37. $5 \text{ pens} = \$11.25$
 $\$11.25 \div 5 = \2.25
 $\$2.25 \div 2 = \4.50
 $\$4.50 \times 4 = \18.00
The cost of 4 books is \$18.00

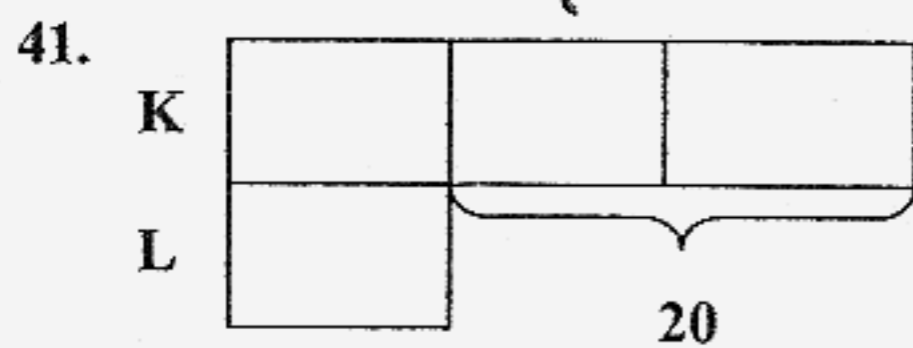
38. $450 + 150 = 600$
 $600 - 75 = 525$
 $\frac{525}{600} = \frac{7}{8}$
She must draw $\frac{7}{8}$ of her savings.

39. $2 : 3 \text{ (x2)}$
 $4 : 6$
 $P : C : G$
 $3 : 4 : 6$
 $3 + 4 + 6 = 13$
The ratio is $3 : 13$

40. $12 - 7 = 5$
 $12 \times 6 = 72$
 $\frac{1}{2} \times 6 \times 12 = 36$
 $\frac{1}{2} \times 5 \times 6 = 15$

$36 + 14 = 51$

The area of the shaded part is 51cm^2



$20 \div 2 = 10$

$10 \times 3 = 30$

Each of them had 30 marbles.

42. $80 \times 60 = 4800$
 $3000 \times 4 = 120000$
 $120000 \div 4800 = 25$
The height is 25cm

43. $\$100 \longrightarrow 2$
 $100 \div 2 = 50$
 $50 \times 7 = 350$
Liling has \$350 at first

44a. $90^\circ + 45^\circ = 135^\circ$
 $\angle CDF$ is 135°

44b. $90^\circ - 45^\circ = 45^\circ$
 $\angle AHB$ is 45°

45a. $6 + 3 = 9$
She has 9 friends.

45b. $9 \times 7 = 63$
 $63 + 3 = 66$
She has 6 stickers.

46a. $\$1.50 \times 5 = \7.50
 $\$1.75 \times 5 = \8.75
 $18 - 10 = 8$
 $\$2.00 \times 8 = \16
 $\$16 + \$8.75 + \$7.50 = \32.25
Family A paid \$32.25

46. $\$48.25 - \$32.25 = \$16$
 $16 \div 2 = 8$
 $18 + 8 = 26$
26cm³ of water was used.

47a. $\frac{7}{7} - \frac{2}{7} = \frac{5}{7}$
 $\frac{5}{5} - \frac{2}{5} = \frac{3}{5}$

$75 \div 3 = 25$

$125 = \frac{5}{7}$

$25 \times 2 = 50$

$50 \div 5 = 10$

Each book costs \$10

47b. $25 \times 7 = 175$
 $175 + 65 = 240$
 $240 + 35 = 275$
She had \$275 at first.

48a. The fraction is $\frac{3}{4}$

48b. $20 \div 2 = 10$
 $15 + 10 = 25$
 $50 \div 25 = 2$
 $2 \times 45 = 90$
There are 90 eggs