

Education and Manpower Bureau

Territory-wide System Assessment 2005

Primary 6

Mathematics

Instructions:

1. There are 44 questions in this test.
2. Answer all questions.
3. The time allowed is 55 minutes.
4. Use of calculators is not allowed.
5. Write your answers in this question booklet.

(a) Multiple choice questions:

Mark your answers by putting a “✓” in the “○”, e.g.:

$$2 + 3 =$$

○ A. 4 ☒ B. 5 ○ C. 6 ○ D. 7

(b) Questions in which you are asked to “Show your working”:

Write your mathematical expressions/equations, answers and statements/conclusions in the space provided. There is NO need to show your rough work.

(c) Other types of questions:

Answer as required in the space provided.

6. Do your rough work on the rough work sheet provided.
7. Write your School Code, Class and Class Number in the spaces below.

School Code

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(5)

Class

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Class No.

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(11)

1. $780 + 105 \div 15 =$ _____

1 mark (12)

2. Calculate $0.3 \div 0.7$, correct your answer to the nearest hundredths.

Answer: _____

1 mark (13)

3. $10 - 3.8 \times 0.3 =$ _____

1 mark (14)

4. $\frac{2}{9} + \frac{4}{9} =$

1 mark (15)

5. $5\frac{4}{5} - 5\frac{3}{10} + 3\frac{3}{4} =$

1 mark (16)

6. There are 12 ice-cream cones in a box. $\frac{2}{3}$ of them are of chocolate flavour. Circle the number of ice-cream cones of chocolate flavour.



1 mark (17)

7. $\frac{5}{9} \times 7\frac{2}{5} =$

1 mark (18)

8. Fill in the boxes with the correct number.

(a) $\frac{12}{18} = \frac{\boxed{}}{3}$

1 mark (19)

(b) $\frac{15}{35} = \frac{45}{\boxed{}}$

1 mark (20)

9. $1 + 4\frac{1}{2} \div \frac{5}{8} = \boxed{}$

1 mark (21)

10. In 627.04, what is the digit in the hundredth place?

☐ A. 0

☐ B. 4

☐ C. 6

☐ D. 7

(22)

11. Which of the following expressions is most suitable for estimating the value of $11.9 \div 3.8$?

☐ A. $11 \div 3$

☐ B. $11 \div 4$

☐ C. $12 \div 3$

☐ D. $12 \div 4$

(23)

12. List all the factors of 64.

Answer: _____

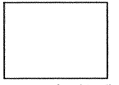
1 mark (24)

13. My brother joins a swimming class. The total tuition fees are \$816 for 12 sessions. The average tuition fee for each session is \$ _____.

1 mark (25)

14. Change $3\frac{7}{11}$ into a decimal number, correct your answer to 2 decimal places.

Answer: _____



1 mark (26)

15. 3 is the highest common factor of

☐ A. 1, 3

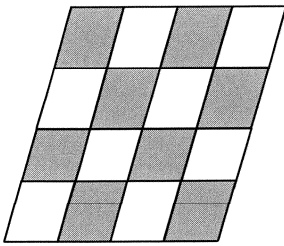
☐ B. 9, 27

☐ C. 12, 21

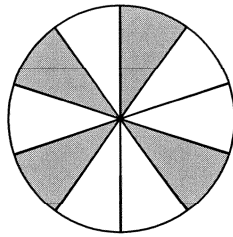
☐ D. 18, 24

(27)

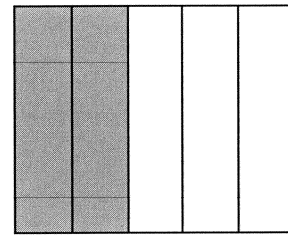
16. Which of the following figures show 40% of the whole figure shaded? Fill in the blank with the letters for the answer.



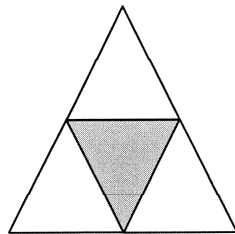
A



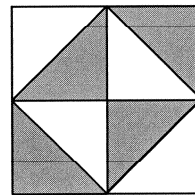
B



C

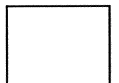


D



E

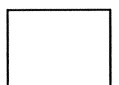
Answer: _____



1 mark (28)

17. Best Plaza has 84 shops. $\frac{3}{4}$ of all the shops are occupied. How many shops are **not** occupied?

Answer: _____ shops are **not** occupied.



1 mark (29)

18. My mother used 72 dollars and 50 cents to buy some strawberries. How many kilograms of strawberries did she buy?
(Show your working)



1 mark (30)

1 mark (31)

1 mark (32)

19. Today when customers buy 3 boxes of fresh milk, they get one extra box free of charge. In this case, what is the average price of one box of milk?
(Show your working)



1 mark (33)

1 mark (34)

1 mark (35)

20. A school held an activity to collect old books. The numbers of different types of old books collected are as follows:

Types	Quantity
Textbooks	240
Cartoons	312
Idiom story books	48

Find the percentage of the total number of collected old books that are textbooks.

(Show your working)

1 mark (36)

1 mark (37)

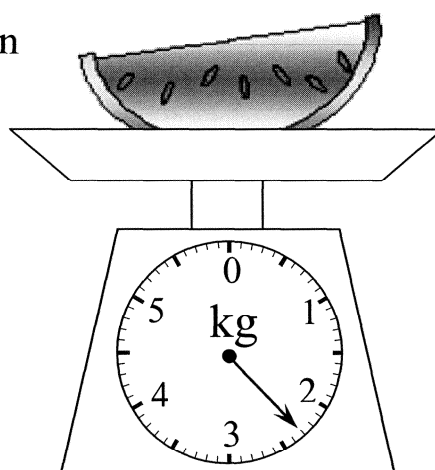
1 mark (38)

21. Workers are repairing a road which is 2.8 km long. On average, they repair 0.7 km in a day. How many days are needed to repair the road?

Answer: _____ days are needed to repair the road.

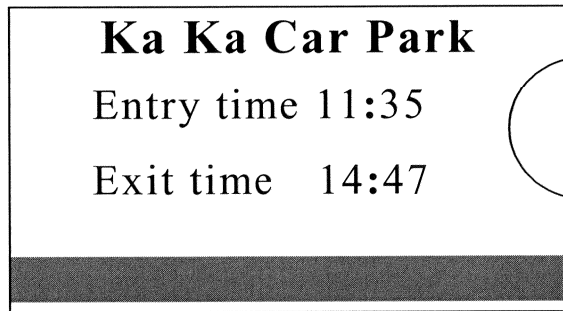
1 mark (39)

22. The weight of the water-melon is _____ kg.

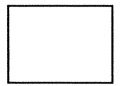


1 mark (40)

23. This is a car park ticket for my father's car. How long has he parked his car?

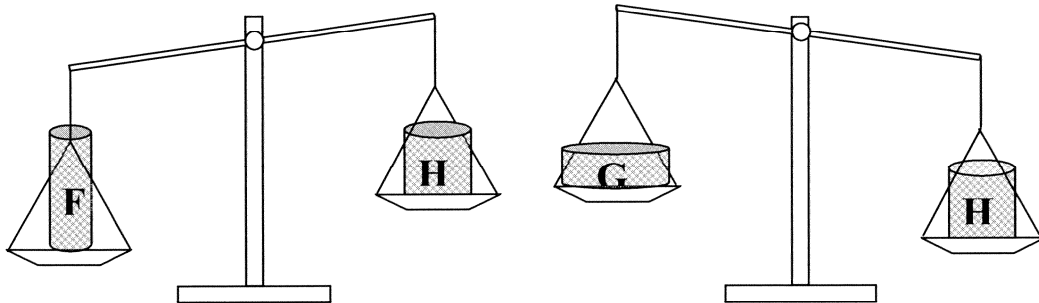


Answer: He has parked for _____ hours _____ minutes.

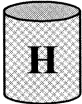
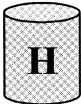
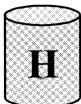


1 mark (41)

24.

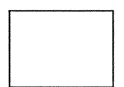


Compare the weights of the three tins F, G and H. Which of the following statements is correct?

- ☐ A.  is the heaviest
- ☐ B.  is lighter than 
- ☐ C.  is heavier than 
- ☐ D.  and  have the same weight

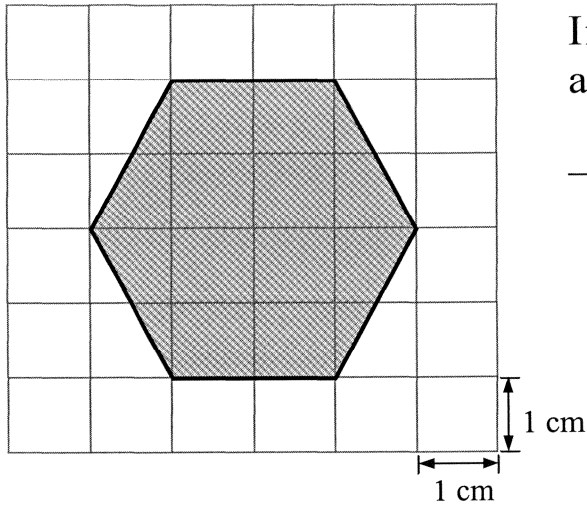
(42)

25. The diameter of a circle is 1 cm. Its circumference is approximately _____ cm.
(The answer must be a whole number)



1 mark (43)

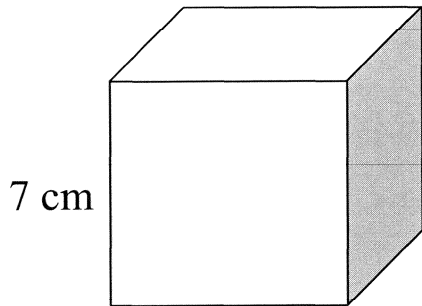
26.



In the figure on the left, the area of the shaded part is _____ cm^2 .

1 mark (44)

27.



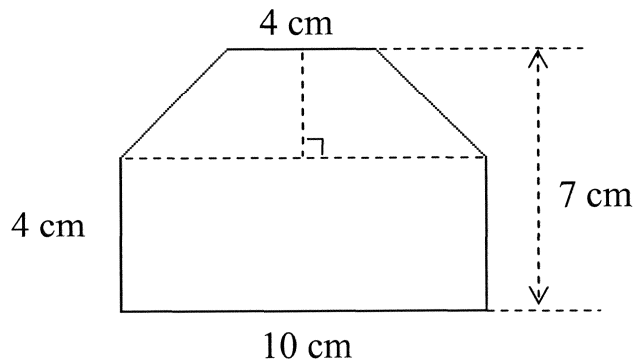
The volume of the cube on the left is _____ cm^3 .

1 mark (45)

28. A rectangular lawn is 50 m long and 40 m wide. My father walks round the lawn 3 times. Altogether he has walked _____ m.

1 mark (46)

29. Calculate the area of the following figure.



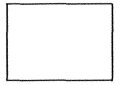
Answer: The area is _____ cm^2 .

1 mark (47)

30. The circumference of a circle is 50.24 cm. What is its radius?

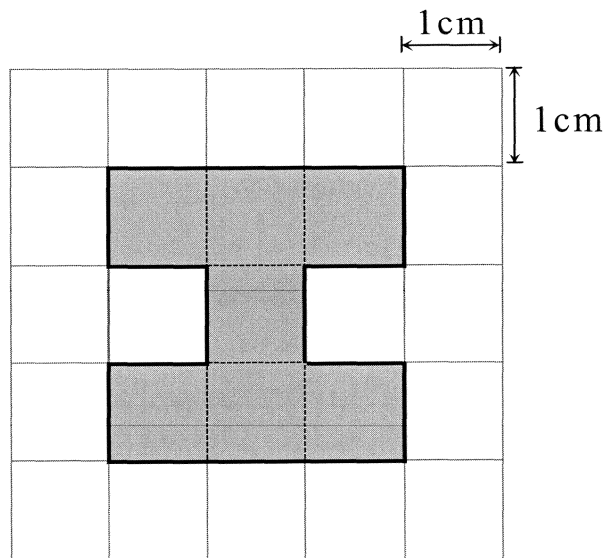
(Take π as 3.14)

Answer: Its radius is _____ cm.

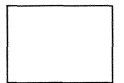


1 mark (48)

31.

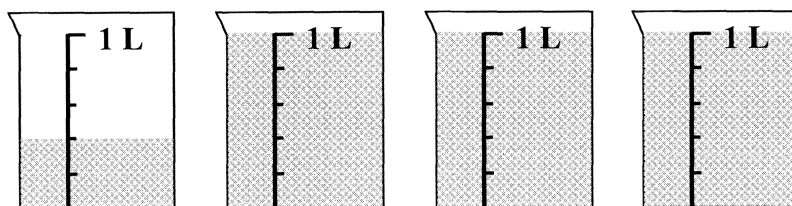
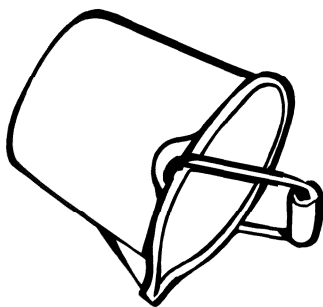


In the figure above, the perimeter of the shaded part is _____ cm.

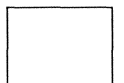


1 mark (49)

32. Fanny fills up the bucket with water. Then she pours all the water into the beakers.



The capacity of the bucket is _____ mL.



1 mark (50)

33.  and  took part in an inter-school athletic contest.



I finished the 200-metre race in 50 seconds.



I finished the 400-metre race in 1 minute 20 seconds.

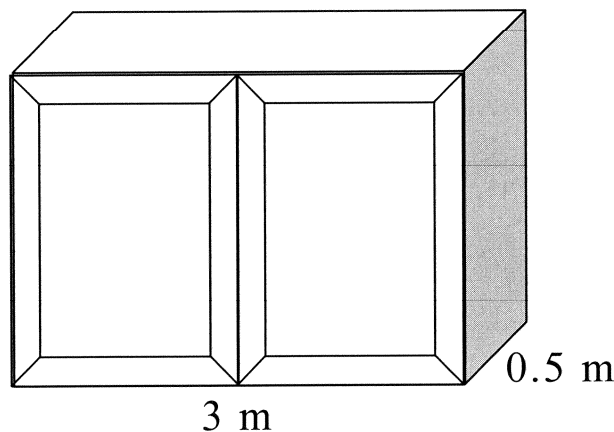
- (a)  ran at a speed of _____ metres per second.

1 mark (51)

- (b)  ran at a speed of _____ metres per second.

1 mark (52)

34. The width and depth of the cupboard shown below is 3 m and 0.5 m respectively. If its volume is 3 m^3 , what is its height?



Answer: The height of the cupboard is _____ m.

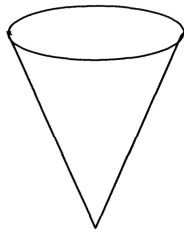
1 mark (53)

35. Which kind of 2-D shapes has four equal sides and four right angles?

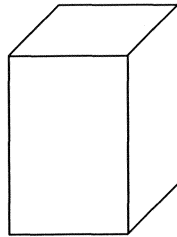
- ☐ A. Parallelogram ☐ B. Rectangle
☐ C. Square ☐ D. Rhombus

(54)

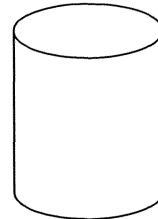
36.



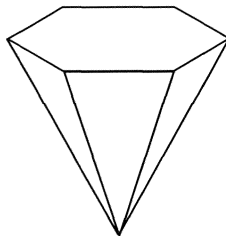
A



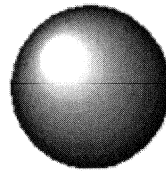
B



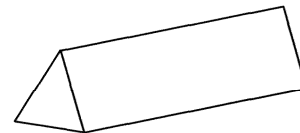
C



D



E



F

(a) Which of the above 3-D shapes are pyramids or cones?
Fill in the blank with the letters for the answer.

Answer: _____

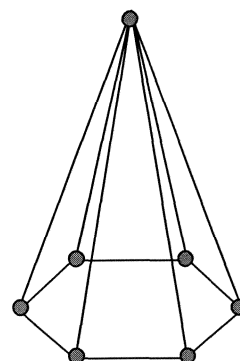
(b) Which of the above 3-D shapes are prisms or cylinders?
Fill in the blank with the letters for the answer.

Answer: _____

1 mark (55)

1 mark (56)

37. For the hexagonal pyramid on the right,
the number of vertices is _____, the
number of edges is _____ and the
number of faces is _____.

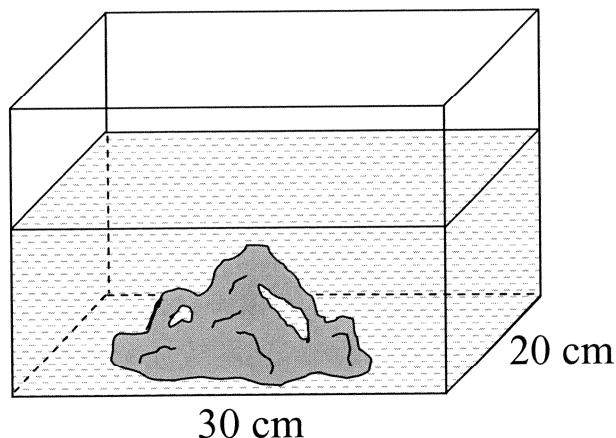


1 mark (57)

1 mark (58)

1 mark (59)

38. After my father has put the rockwork into the aquarium, the water level rises up by 2 cm. What is the volume of the rockwork?



Answer: The volume of the rockwork is _____ cm^3 .

1 mark (60)

39. Which of the following are equations? Fill in the blank with the letters for the answer.

- A. $9p + 54$
- B. $30 \div 5 = 6$
- C. $4 + y = 12$
- D. $26 = 8t - 14$
- E. $7 + 9 = 9 + 7$

Answer: _____

1 mark (61)

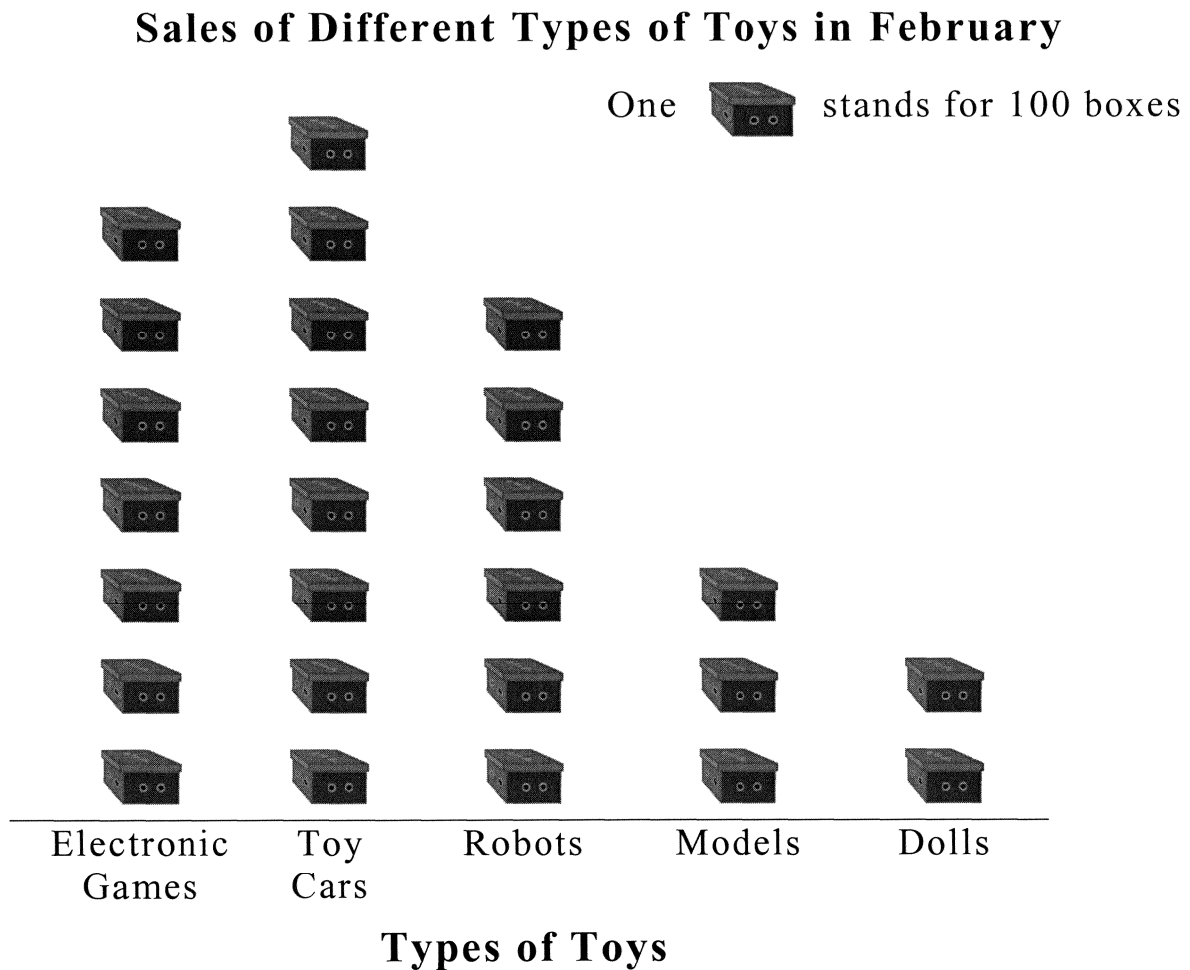
40. Solve the equation:

$$20k = 1$$

$$k =$$

1 mark (62)

41. The following pictogram shows the sales of the different types of toys in a toy shop in February.



- (a) What is the total number of boxes of electronic games and toy cars that were sold in February?

Answer: A total of _____ boxes were sold.

1 mark (63)

- (b) Express the sales of models as a fraction of the sales of robots.

Answer: The fraction is _____ .

1 mark (64)

- (c) The shopkeeper wants to order those types of toys with sales of 700 boxes or more. Which type(s) of toys should he order?

Answer: He should order _____ .

1 mark (65)

42. Yesterday our school held the Stall Games Day. Each participant voted for 'the most favourite stall game'. The following table shows the votes for each game:

Types of Games	Number of Votes	Rounded to the nearest tens
Perfect Hit	200	200
Interplanetary Spiders	282	280
Wise Choice	358	360
Environmental Journey	236	240
Quick Response	343	340

According to the rounded data, complete the bar chart below.



1 mark (66)

43. Class 6B has 18 girls. The number of boys is y less than that of girls. What is the number of boys in Class 6B?

Answer: The number of boys in Class 6B is _____ .

1 mark (67)

44. Kelvin collects different kinds of toy cars. He has 16 buses, which is $\frac{2}{5}$ of his total collection. **Use the method of solving equation**, find the total number of toy cars Kelvin has collected.

(Show your working)

Let the total number of toy cars Kelvin has collected be y .

1 mark (68)

1 mark (69)

1 mark (70)

- END OF PAPER -

