

**Education and Manpower Bureau**  
**Territory-wide System Assessment 2007**  
**Primary 6**  
**Mathematics**

**Instructions:**

1. There are 42 questions in this test.
2. Answer all questions.
3. Time allowed is 50 minutes.
4. Use of calculators is not allowed.
5. Write your answers in this Question-Answer 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 boxes below.

**School Code**  
學校編號

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(5)

**Class**  
班別

6	
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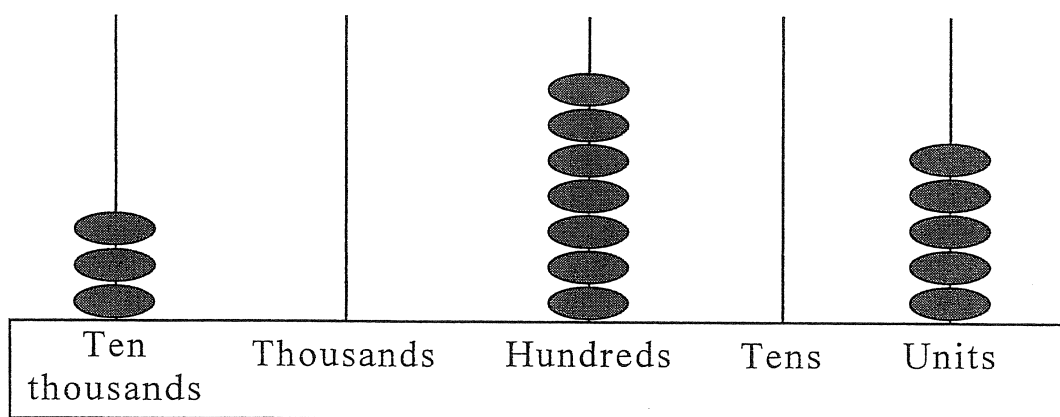
**Class No.**  
班號

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(11)

Write one capital letter in this box  
此格只許填寫一個大楷英文字母

1.



(a) Write in words the number shown on the above abacus.

Answer: \_\_\_\_\_

1 mark (12)

(b) In the number shown on the above abacus, the digit in the thousands place is \_\_\_\_\_, and the value of this digit is \_\_\_\_\_.

1 mark (13)

1 mark (14)

2.  $53 \times 409 =$  \_\_\_\_\_

1 mark (15)

3.  $3\frac{1}{9} - 1\frac{2}{9} + 2\frac{4}{9} =$

1 mark (16)

4.  $10\frac{1}{2} \div 2\frac{2}{13} =$

1 mark (17)

5.  $3\frac{5}{6} + 2\frac{1}{10} \times 5 =$

1 mark (18)

6.  $3.6 \times (12 - 4.9) =$  \_\_\_\_\_

1 mark (19)

7. Which of the following expressions is most suitable for estimating the value of  $2.1 + 5\frac{1}{9} \div \frac{1}{3}$  ?

☐ A.  $2 + 5 \div 3$

☐ B.  $2 + 5 \times 3$

☐ C.  $2 + 6 \div 3$

☐ D.  $2 + 6 \times 3$

(20)

8. List all the factors of 38.

Answer: \_\_\_\_\_

1 mark (21)

9. Before visiting his uncle at the hotel, Tom has to find out his uncle's room number. His uncle says, "My room number is one of the following numbers and it is a common multiple of 27 and 36." Circle the room number of Tom's uncle.




1 mark (22)

10. Find any two numbers that have 28 as their least common multiple (L.C.M.).

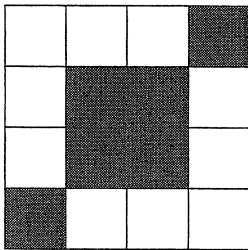
Answer: The two numbers are \_\_\_\_\_ and \_\_\_\_\_ .

1 mark (23)

11. In the number 0.571, the value of the digit '7' is \_\_\_\_\_.

1 mark (24)

12. Express the shaded part as a fraction and also as a percentage of the whole diagram.



(a) As a fraction :



1 mark (25)

(b) As a percentage : \_\_\_\_\_ %

1 mark (26)

13. (a) Change the following percentage into a decimal.

$$206\% = \underline{\hspace{2cm}}$$

1 mark (27)

- (b) Change the following decimal into a percentage.

$$0.074 = \underline{\hspace{2cm}}\%$$

1 mark (28)

14. In the diagram below, the belt is sold at a discount of \_\_\_\_\_ %.

1 mark (29)

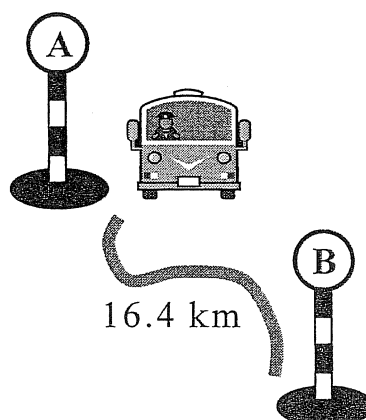


15.  $1\frac{1}{2}$  dozen egg puddings weigh  $439\frac{1}{5}$  g. What is the average weight of each egg pudding? (Give the answer as a fraction.)

Answer: The average weight is  g.

1 mark (30)

16. The distance between the two minibus stops A and B is 16.4 km. A minibus makes 8 **round trips** between stops A and B every day ( a round trip means going from stop A to stop B, and then back to stop A). Altogether it travels \_\_\_\_\_ km daily.




1 mark (31)

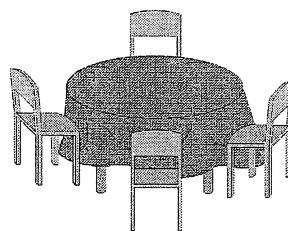
17. The diagram on the right is a shopping receipt from a supermarket. How much money has the customer saved?

<b><u>Bargain Supermarket</u></b>		
Welcome		
<u>Item</u>	<u>Original Price</u>	<u>Special Price</u>
Mango	\$25.80	\$20.90
Rice Cake	\$17.40	\$16.60
<b>Total</b>		<b>\$37.50</b>
Cash		\$40.00
Change		\$ 2.50
16-6-2007	14:30:28	
Staff: 789	T# 12345	

Answer: The customer has saved \_\_\_\_\_ dollars and \_\_\_\_\_ cents.

1 mark (32)

18. A dining table and four chairs altogether cost \$3 490. If the dining table costs \$1 990, how much does one chair cost?



(Show your working)

1 mark (33)

1 mark (34)

1 mark (35)

19. A family goes to a farm to pick lychee. Mum picks  $3\frac{1}{4}$  kg of lychee, Jane picks  $1\frac{2}{5}$  kg less than Mum, and Dad picks  $2\frac{1}{2}$  kg more than Jane.

(a) Jane picks \_\_\_\_\_ kg of lychee.

1 mark (36)

(b) How many kg of lychee does Dad pick?

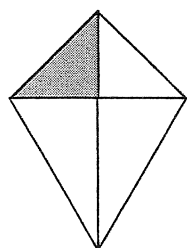
(Show your working)

1 mark (37)

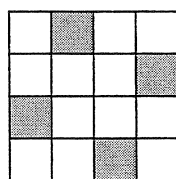
1 mark (38)

1 mark (39)

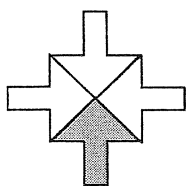
20. Which of the following figures have  $\frac{1}{4}$  shaded?



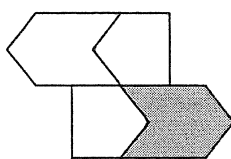
**A**



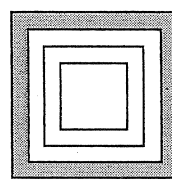
**B**



**C**



**D**



**E**

Answer: \_\_\_\_\_

1 mark (40)

21. Fill in each of the blanks below with a suitable unit of measurement.

(a) The length of a ball pen is about 10 \_\_\_\_\_.

1 mark (41)

(b) The storage capacity of an electric water heater is about 15 \_\_\_\_\_.

1 mark (42)

(c) A bag of flour weighs about 2 \_\_\_\_\_.

1 mark (43)

(d) The thickness of a notebook computer is about 25 \_\_\_\_\_.

1 mark (44)

(e) The weight of a tea bag is about 2 \_\_\_\_\_.

1 mark (45)

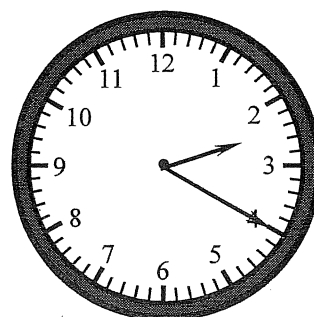
22. The timetable below shows part of the Sunday television programme.

Time	Programme
12 : 30	News
13 : 30	Recycle Tour
14 : 00	Easy Life
14 : 30	Animal World
15 : 00	Sports
16 : 00	Cartoons

- (a) 'Recycle Tour' begins at \_\_\_\_\_ past \_\_\_\_\_ in the \* morning / afternoon (\*circle the answer).

1 mark (46)

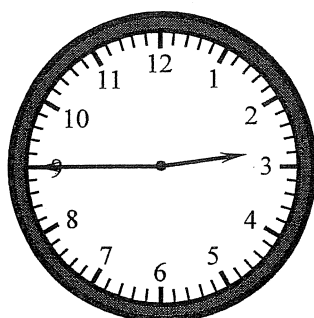
- (b) Katie takes a look at the clock (shown on the right) while she is watching television. Katie is watching the programme ' \_\_\_\_\_ ', and it will end in \_\_\_\_\_ minutes.



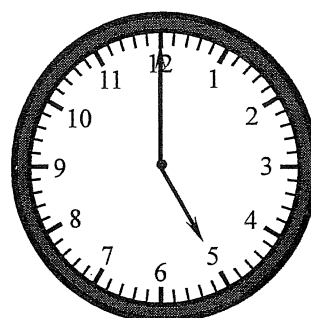

1 mark (47)

- (c) The programme 'Sports' is on television when the telephone rings. The time the telephone rings could be

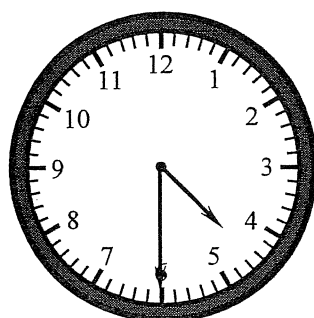
☐ A.



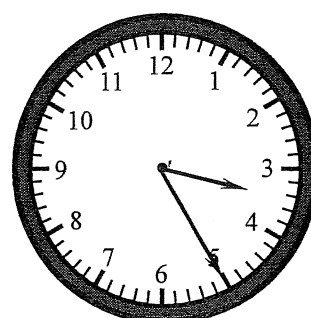
☐ B.



☐ C.



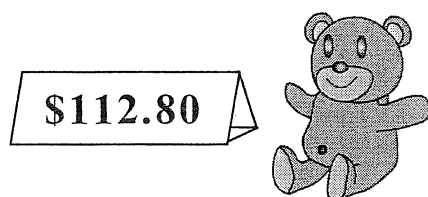
☐ D.



(48)



23. My sister wants to buy a teddy bear in a toy shop.



- (a) The teddy bear costs \_\_\_\_\_ dollars and \_\_\_\_\_ cents.

1 mark (49)

- (b) My sister has

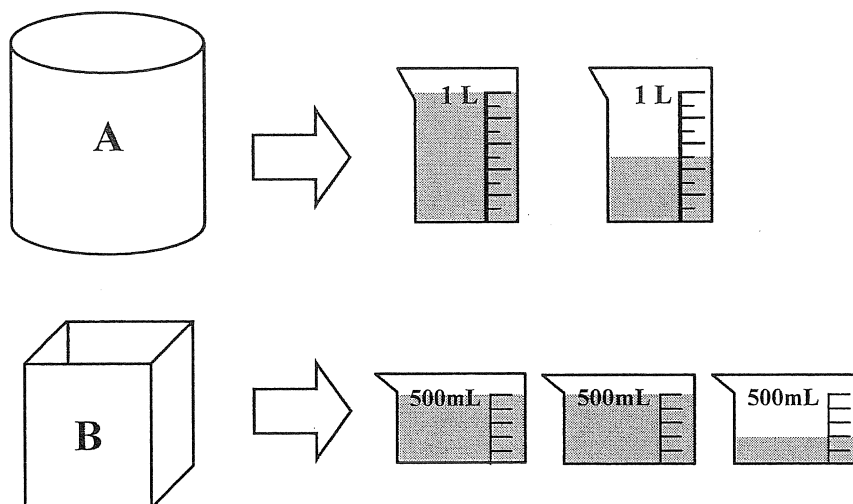


How much more money does she need to buy the teddy bear?

Answer: She needs \_\_\_\_\_ dollars and \_\_\_\_\_ cents more.

1 mark (50)

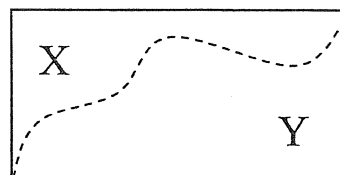
- 24.



Containers A and B are completely filled with water. All the water in the containers is then poured into two different types of beakers (see the diagram above). The capacity of container \_\_\_\_\_ is larger as it can hold \_\_\_\_\_ mL more water than the other container.

1 mark (51)

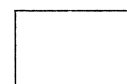
25. The rectangle on the right is cut along the dotted line into two parts, X and Y. Which of the following statements is correct?



- ☐ A. The perimeter of part X is shorter
- ☐ B. The perimeter of part Y is shorter
- ☐ C. The perimeters of part X and part Y are equal
- ☐ D. It is not possible to compare the perimeters of part X and part Y

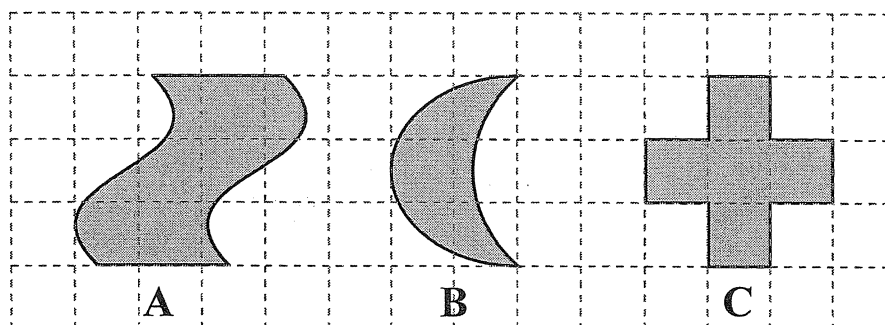
(52)

26. A string is 180 cm long. It can just go around a square 3 times. The side of the square is \_\_\_\_\_ cm long.

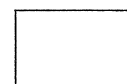


1 mark (53)

27. Compare the areas of the following 2-D shapes A, B and C, and arrange them in ascending order.



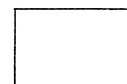
Answer: \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_  
(Smallest) (Largest)



1 mark (54)

28. The area of a rectangle is  $900 \text{ cm}^2$ . If its length is 36 cm, what is its width?

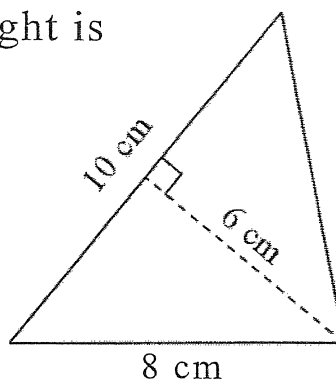
Answer: Its width is \_\_\_\_\_ cm.



1 mark (55)

29. The area of the triangle on the right is

- ☐ A.  $24 \text{ cm}^2$   
☐ B.  $30 \text{ cm}^2$   
☐ C.  $40 \text{ cm}^2$   
☐ D.  $60 \text{ cm}^2$

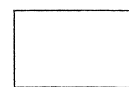
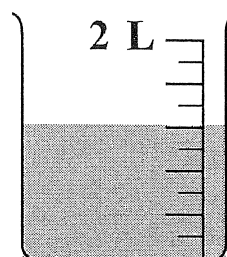


(56)

30. Mum pours some water into a beaker as shown on the right:

The volume of the water is

\_\_\_\_\_. (Give the answer with a unit.)



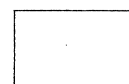
1 mark (57)

31. A man sets off at 15:40 on a motorcycle that has an average speed of  $70 \text{ km/h}$ . He arrives at his destination at 16:16.

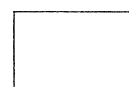
(a) The motorcycle travels for \_\_\_\_\_ minutes.

(b) How far does the motorcycle travel in km?

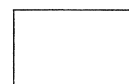
(Show your working)



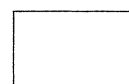
1 mark (58)



1 mark (59)



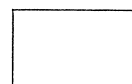
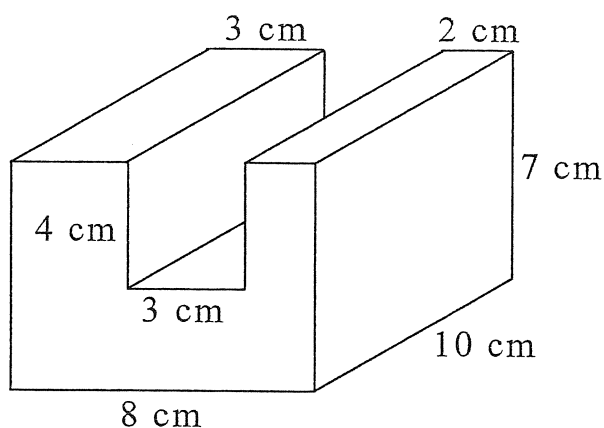
1 mark (60)



1 mark (61)

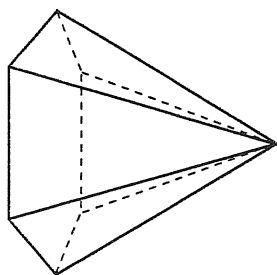
32. The volume of the solid on the right is

\_\_\_\_\_  $\text{cm}^3$ .

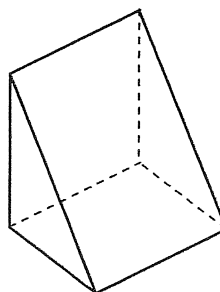


1 mark (62)

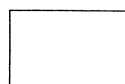
33. Name the following 3-D shapes.



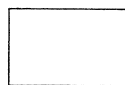
(a) \_\_\_\_\_



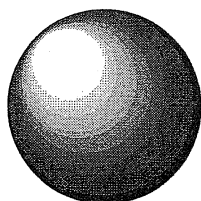
(b) \_\_\_\_\_



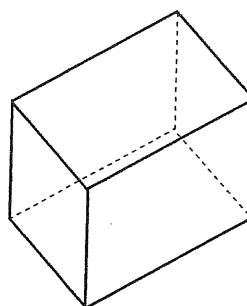
1 mark (63)



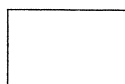
1 mark (64)



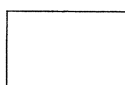
(c) \_\_\_\_\_



(d) \_\_\_\_\_



1 mark (65)



1 mark (66)

34. The diameter of a wheel is 50 cm. It makes 3 complete turns on a flat surface. How far does the wheel go? (Take  $\pi$  as 3.14.)

☐ A. 157 cm

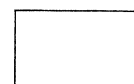
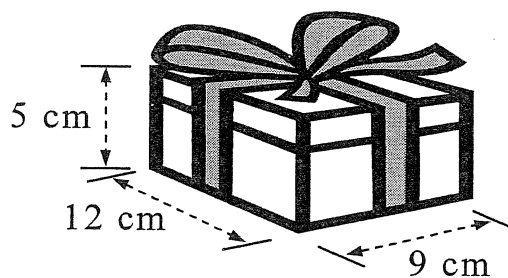
☐ B. 314 cm

☐ C. 471 cm

☐ D. 942 cm

(67)

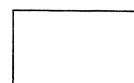
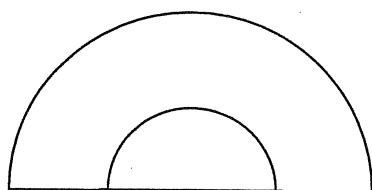
35. The diagram on the right shows a rectangular box. Its volume is \_\_\_\_\_  $\text{cm}^3$ .



1 mark (68)

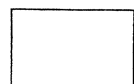
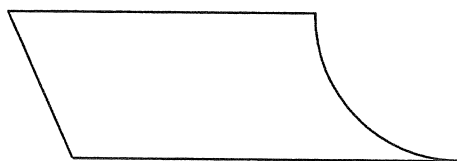
36. Study the following diagrams and \* circle the answer(s) (there may be more than one answer).

- (a) The diagram below is made up of \* straight line(s) / curve(s) / parallel lines / perpendicular lines.



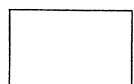
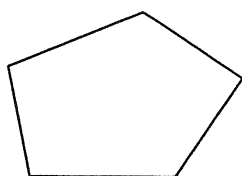
1 mark (69)

- (b) The diagram below is made up of \* straight line(s) / curve(s) / parallel lines / perpendicular lines.



1 mark (70)

- (c) The diagram below is made up of \* straight line(s) / curve(s) / parallel lines / perpendicular lines.



1 mark (71)

37. Which of the following is an equation?

- ☐ A.  $24 - \frac{b}{4} = 0$
- ☐ B.  $35 \div 7 - 3 = 2$
- ☐ C.  $12k + 7$
- ☐ D.  $W + 8 < 12$

(72)

38. Solve the equation:

$$\frac{y}{3} - 2\frac{1}{2} = 3$$

$$y = \boxed{\phantom{000}}$$

1 mark (73)

39. Carol has 75 books. She has 15 less than twice the number of books John has. Find the number of books John has by **the method of solving equation**.

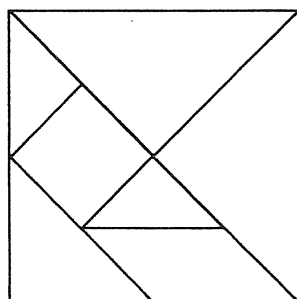
(Show your working)

1 mark (74)

1 mark (75)

1 mark (76)

40. The diagram below shows a tangram. What types of 2-D shapes is it made up of?



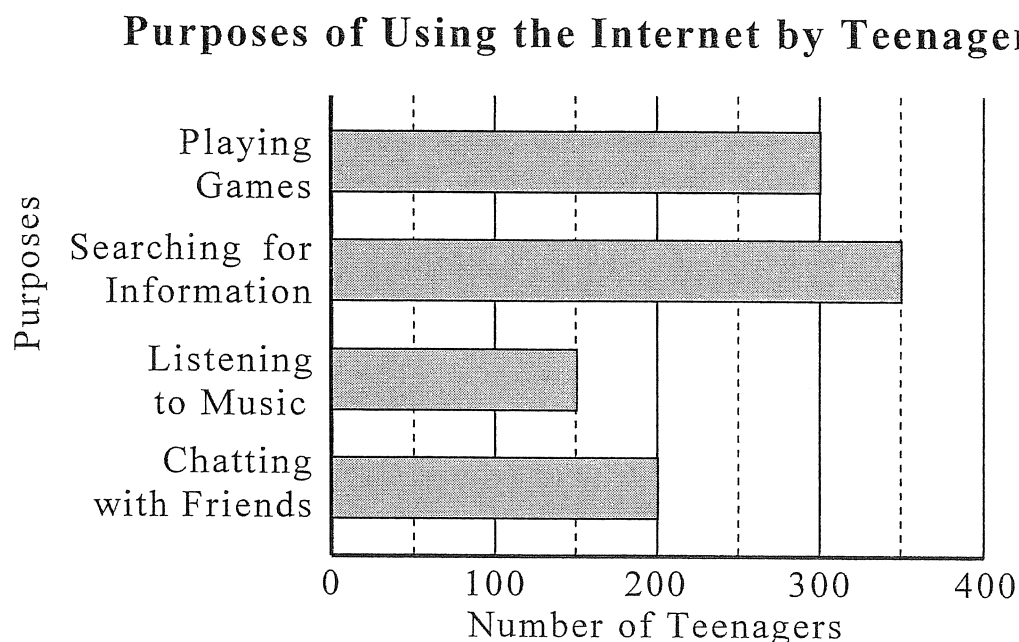

1 mark (77)

1 mark (78)

1 mark (79)

Answer: It is made up of \_\_\_\_\_ ,  
\_\_\_\_\_ and \_\_\_\_\_ .

41. A community centre conducts a survey to find out the purposes of using the internet by teenagers. Each teenager taking part in the survey can choose only one purpose. The results of the survey are as follows.



- (a) The most popular purpose of using the internet by teenagers is \_\_\_\_\_. The number of these teenagers is \_\_\_\_\_.
- (b) The total number of teenagers taking part in the survey is \_\_\_\_\_.
- (c) Express the number of teenagers using the internet for Chatting with Friends as a fraction of the total number of teenagers taking part in the survey.

Answer: The fraction is

- (d) 70% of teenagers using the internet for Playing Games are boys. The number of these boys is

\_\_\_\_\_.

1 mark (80)

1 mark (81)

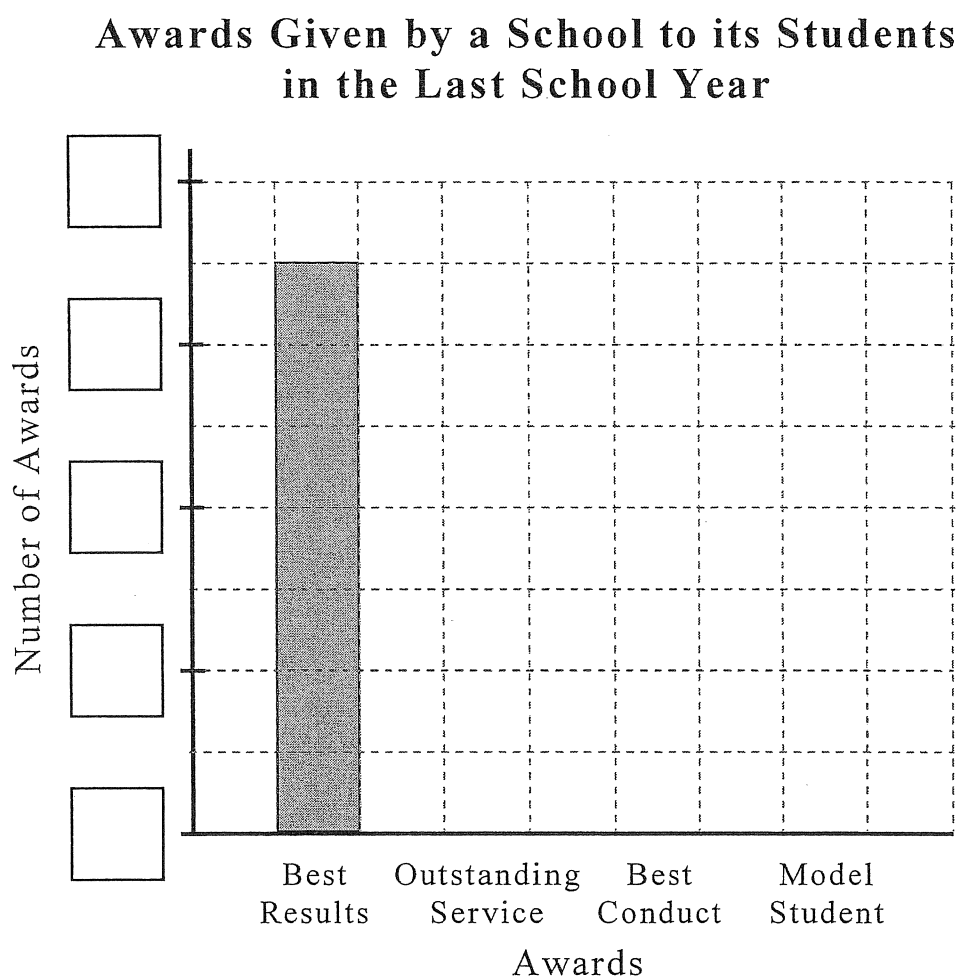
1 mark (82)

1 mark (83)

42. The table below shows the number of awards given by a school to its students in the last school year.

Awards	Best Results	Outstanding Service	Best Conduct	Model Student
Number	70	50	40	60

Using the above data, complete the following bar chart and fill in the boxes with the correct numbers.



1 mark (84)

1 mark (85)

— END OF PAPER —