6	M	E	1

(1)

Education and Manpower Bureau
Territory-wide System Assessment 2006
Primary 6
Mathematics

Instructions:

1. There are 42 questions in this test.
2. Answer all questions.
3. The time allowed is 50 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 學校編號 | | | | (5)

Class 班別 | 6 | | ↑ **Write one capital letter in this box 此格只許填寫一個大楷英文字母**

Class No. 班號 | | | (11)

Marker's Use Only

1. $68 \times 35 =$ _____

1 mark (12)

2. $748 \div (444 - 376) =$ _____

1 mark (13)

3. Arrange the following fractions in descending order.

$\frac{1}{4}$ $\frac{5}{6}$ $\frac{3}{5}$

Answer: [ ] , [ ] , [ ]
(largest) (smallest)

1 mark (14)

4. $2\frac{3}{7} - \frac{5}{7} =$ [ ]

1 mark (15)

5. $1\frac{3}{10} \div \frac{2}{5} =$ [ ]

1 mark (16)

6. $120 \div 2.4 =$ _____

1 mark (17)

7. $0.86 \div 0.4 - 0.2 =$ _____

1 mark (18)

8. 14 is a common multiple of

○ A. 2 , 7 ○ B. 4 , 7
○ C. 28 , 42 ○ D. 36 , 42

(19)

Marker's Use Only

9. The highest common factor (H.C.F.) of 18 and 45 is _____ .

1 mark (20)

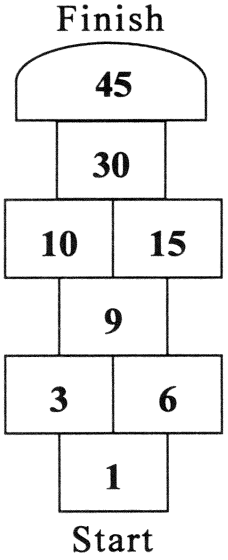
10. Which of the following expressions is most suitable to estimate the value of $15\frac{8}{9} \times \frac{1}{12}$?

(21)

○ A. 16×1 ○ B. 16×0.1

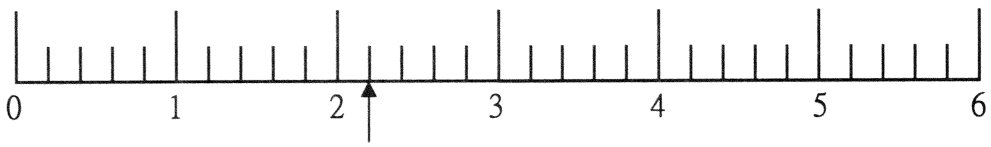
○ C. 15×0.2 ○ D. 15×1

11. My sister is playing the "Jumping Game". She has to jump onto those numbers which are factors of 45. Circle the numbers she must jump onto to finish the game.



1 mark (22)

12. The markings shown below are evenly spaced out and each mark represents a numerical value. Use a decimal number to write down the numerical value of the mark pointed out by the arrow.



Answer: _____

1 mark (23)

13. Change $\frac{27}{50}$ into a decimal number.

Answer: _____

1 mark (24)

Go on to the next page

Marker's Use Only

14. In the number 7.263,

(a) the digit '6' is in the _____ place, and

1 mark (25)

(b) the value of the digit '3' is _____.

1 mark (26)

15. (a) Change 185 % into a decimal number.

Answer: _____

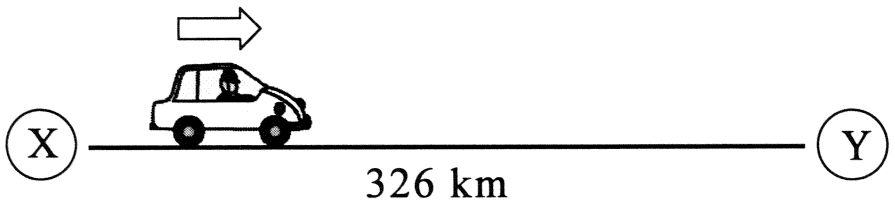
1 mark (27)

(b) Change 0.38 into a percentage.

Answer: _____ %

1 mark (28)

16. The distance between X and Y is 326 km. A car travels from X to Y at a speed of 84 km/h. After 3 hours, the car is _____ km from Y.



1 mark (29)

17. My brother bought a mobile phone for $930. Three months later, he sold the mobile phone for $\frac{3}{5}$ of the original price. My brother sold his mobile phone at a price of $ _____.

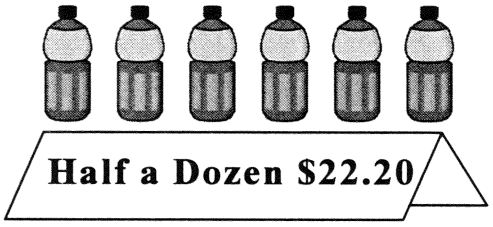
1 mark (30)

18. The height of each storey of a building is 3.2 m. An elevator starts from the ground floor and goes up 16 storeys. The elevator has moved up _____ m.

1 mark (31)

Marker's Use Only

19. The average cost of each bottle is _____ dollars and _____ cents.



1 mark (32)

20. Mr. Lee prepares 60 litres of soup every day and he pours $\frac{2}{5}$ of the soup into 3 big pots to make noodles. The average amount of soup in each pot is _____ litres.

1 mark (33)

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

(a) The capacity of a can of soft drink is 355 _____.

1 mark (34)

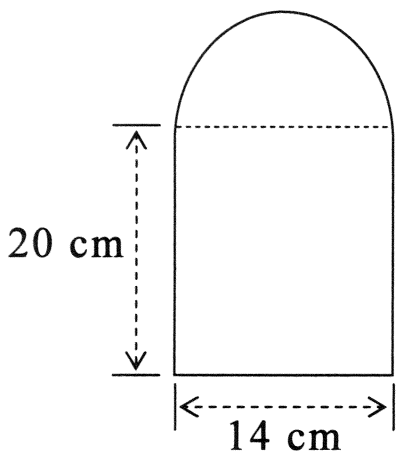
(b) A domestic electric kettle can hold 2 _____ of water.

1 mark (35)

(c) A bottle of family size body lotion contains 750 _____ of lotion.

1 mark (36)

22. The figure on the right is made up of a rectangle and a semicircle. Find its perimeter. (Take π as $\frac{22}{7}$)



○ A. 62 cm
○ B. 76 cm
○ C. 90 cm
○ D. 98 cm

(37)

Go on to the next page

Marker's Use Only

23. The table below shows the special price for buffet lunch at Big Restaurant.

	Special Price
Buffet	\$66.70 (Start between 11:00 – 12:30) \$80.10 (Start between 12:30 – 14:00)

(a) Jenny and her mother arranged to meet at Big Restaurant at 1:10 p.m. to have a buffet lunch together. Both of them arrived on time and paid a total of \$ _____ for the buffet lunch.

1 mark (38)

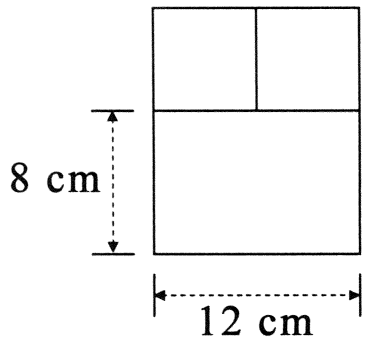
(b) If Jenny and her mother arrived 45 minutes earlier, how much would they have saved altogether? (Show your working)

1 mark (39)

1 mark (40)

1 mark (41)

24. The figure on the right is made up of two squares and one rectangle.



(a) The area of one square is _____ cm^2.

1 mark (42)

(b) The area of the whole figure is _____ cm^2.

1 mark (43)

Marker's Use Only

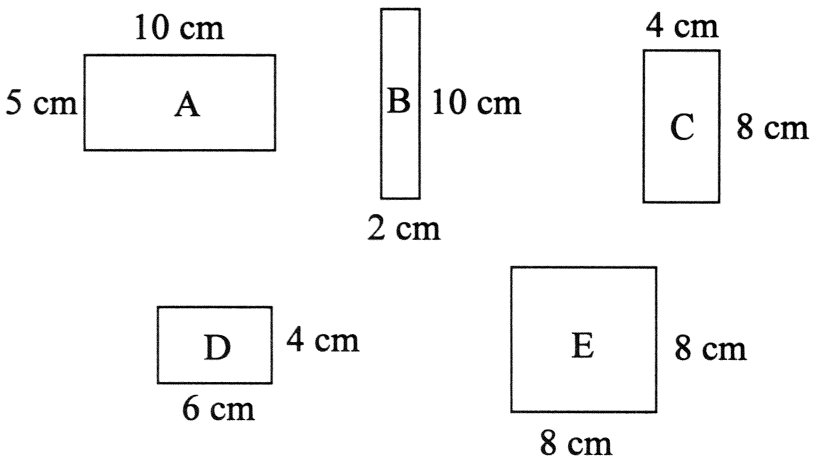
25. A tin of soup originally contained 280 mL of soup. Now it offers an extra 70 mL of soup. Express the amount of the extra offer as a **percentage** of the original amount.
(Show your working)

1 mark (44)

1 mark (45)

1 mark (46)

26.



Each of the five 2-D shapes A, B, C, D and E shown above is either a rectangle or a square.

(a) What is the perimeter of A?

Answer: The perimeter of A is _____ cm.

1 mark (47)

(b) The perimeters of which two shapes differ by 10 cm?

Answer: The perimeters of _____ and _____ differ by 10 cm.

1 mark (48)

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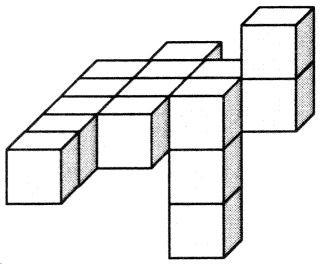
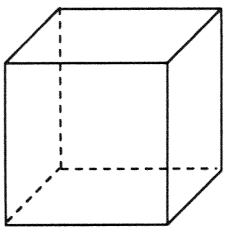
Marker's Use Only

27. Each is 1 cm^3 in volume and all the used to make the 3-D solid on the right are shown in the figure. The volume of the 3-D solid is _____ cm^3.



1 mark (49)

28. 

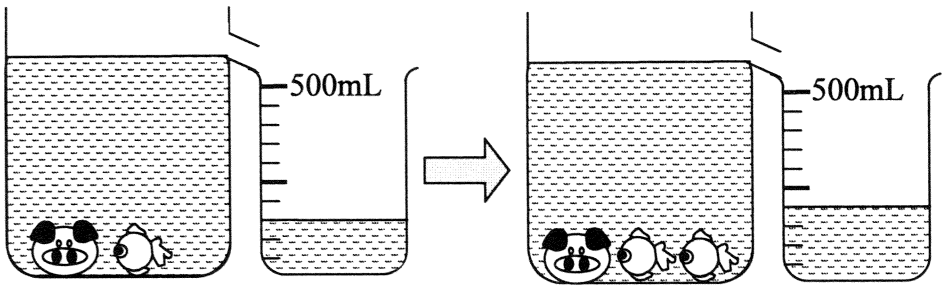
The figure on the left is a cubical box with one side measuring 20 cm.

Its volume is _____ cm^3 and

its capacity is _____
(give your answer with a unit).

1 mark (50)

1 mark (51)

29. 

(a) The volume of one is _____ cm^3.

(b) The volume of one is _____ cm^3.

1 mark (52)

1 mark (53)

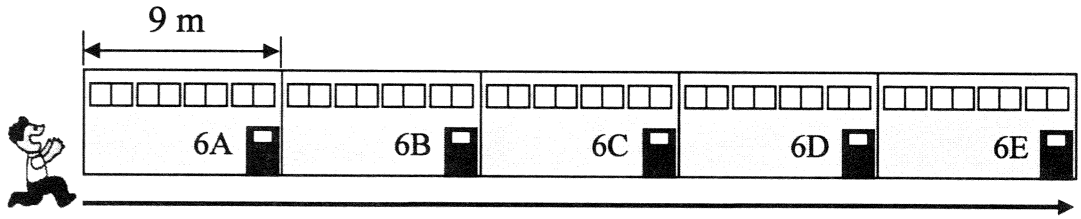
30. Which of the following units is most suitable to measure the speed of a roller coaster?

- ○ A. hours per kilometre
- ○ B. metres per hour
- ○ C. kilometres per second
- ○ D. kilometres per hour

(54)

Marker's Use Only

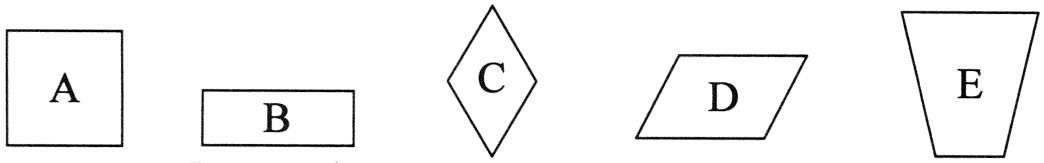
31.



When the recess bell rang, Tim ran along the corridor outside the 5 classrooms from one end to the other at a speed of 3 m/s. If the length of each classroom is 9 m, he ran for _____ seconds.

1 mark (55)

32.



Square Rectangle Rhombus Parallelogram Trapezium

Following the properties given in the table below, fill in each of the blanks with the letter for your answer.

Properties	Shapes		
	(a) _____	(b) _____	(c) _____
4 equal sides	✓	×	×
4 equal angles	✓	×	×
2 pairs of equal opposite sides	✓	✓	×
2 pairs of parallel opposite sides	✓	✓	×
Only 1 pair of parallel opposite sides	×	×	✓

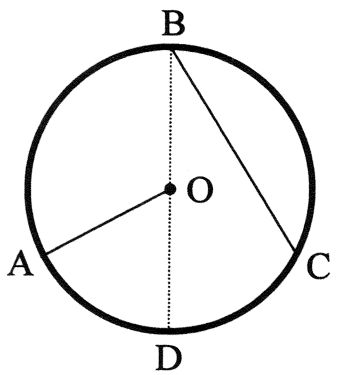
1 mark (56)

1 mark (57)

1 mark (58)

33. In the figure on the right, OA is a radius of the circle and BD is a diameter. Which point is the centre?

Answer: Point _____ is the centre.



1 mark (59)

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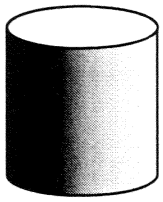
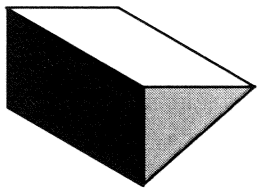
Marker's Use Only

34. Name the following 3-D shapes.

(a) 

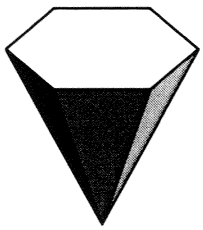
Answer: _____

(b) 

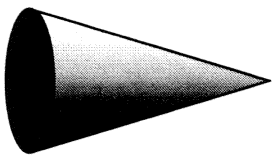
Answer: _____

1 mark (60)

1 mark (61)

(c) 

Answer: _____

(d) 

Answer: _____

1 mark (62)

1 mark (63)

35. Miss Tse awards her pupils with a gift based on their average marks in 4 Mathematics tests.

Average Marks	Gifts
95 – 100	Pencil case
90 – 94	Notebook
85 – 89	Ball-pen
80 – 84	Ruler

Candy's marks for the 4 Mathematics tests were 92, 88, 85 and 91. The gift she will get is _____.

1 mark (64)

36. Solve the equation:

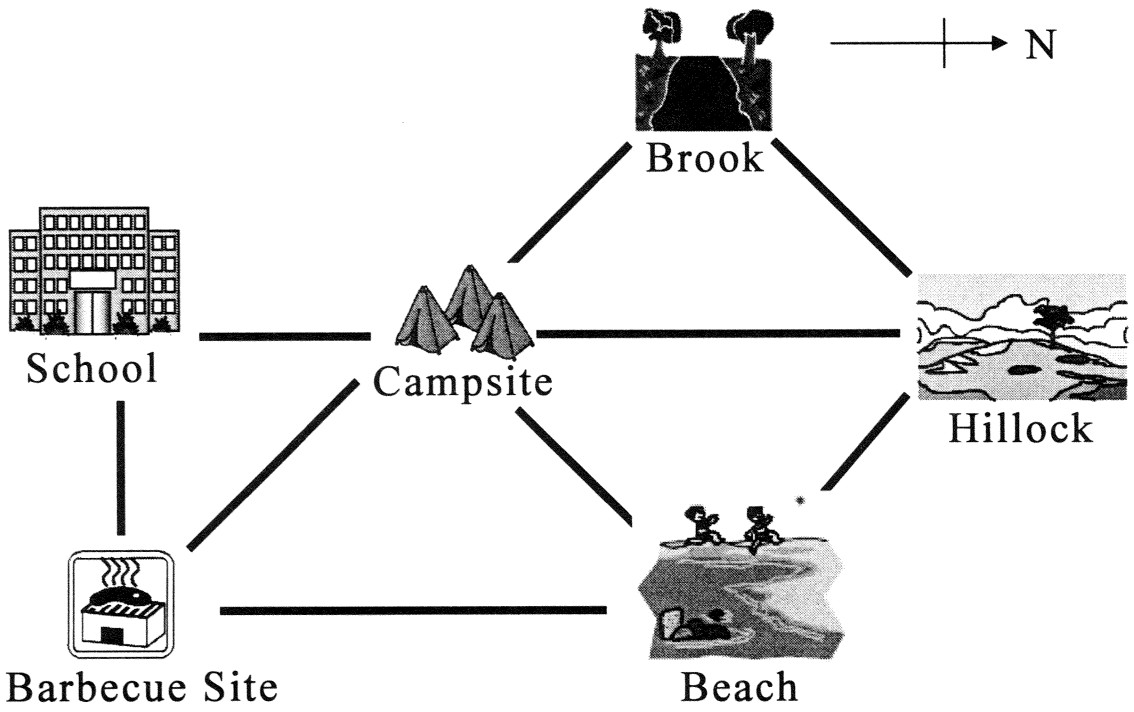
$5y - 24 = 11$

$y =$ ☐

1 mark (65)

Marker's Use Only

37. Eva sets off from school and walks due north to the campsite to meet her classmates.



(a) She sets off from the campsite and walks due _____ (direction) to go to the hillock, and then walks towards the _____ (direction) to reach the brook to enjoy the scenery there.

1 mark (66)

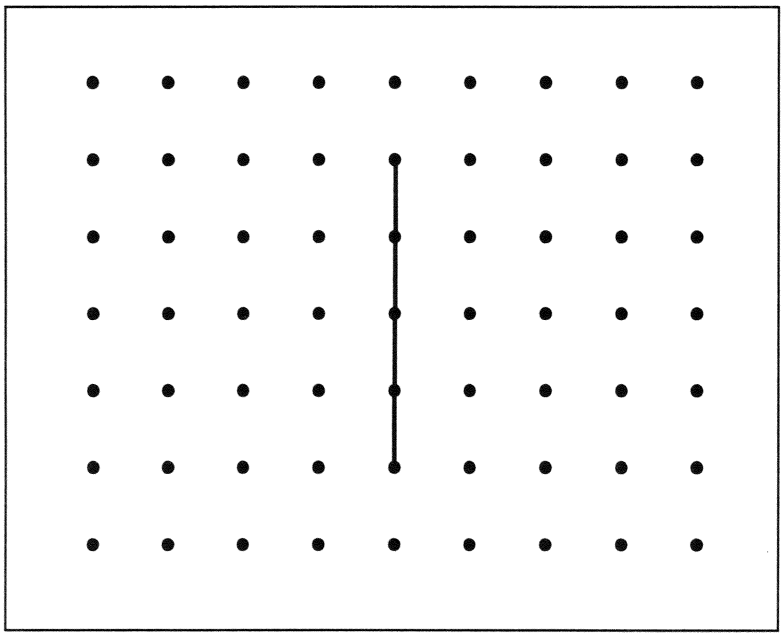
(b) Other pupils start from the campsite and walk towards the _____ (direction) to get to the beach for a swim. Then they walk due _____ (direction) to go to the barbecue site.

1 mark (67)

Go on to the next page

Marker's
Use Only

38. In the figure below, add two straight lines to form an isosceles triangle with the given straight line (the vertices of the isosceles triangle must be at the points given in the figure).



1 mark (68)

39. Which of the following algebraic expressions represents 'divide a by 12 and then add 10' ?

○ A. $12a + 10$

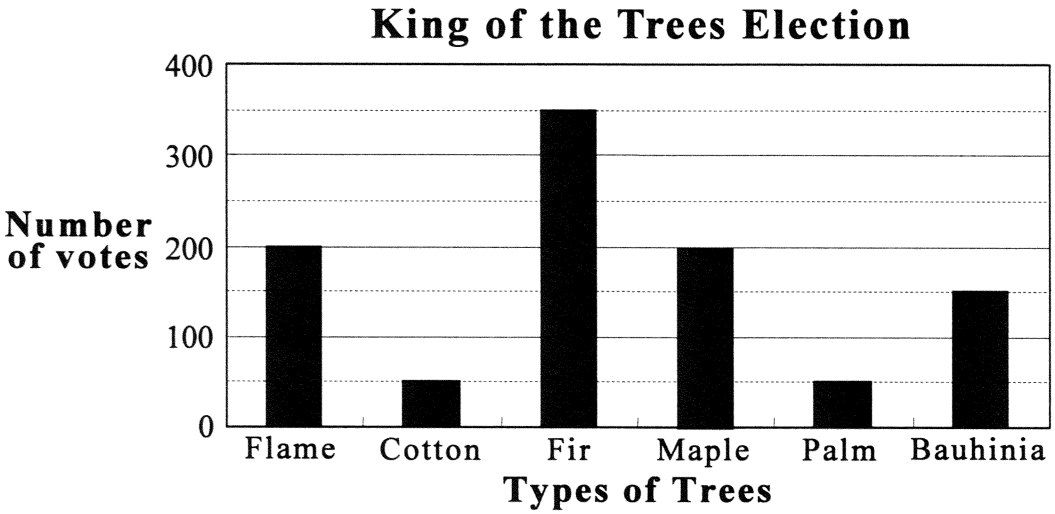
○ B. $\frac{12}{a} + 10$

○ C. $\frac{a}{12} + 10$ (69)

○ D. $\frac{a + 10}{12}$

Marker's
Use Only

40. During the "School Environmental Protection Week", all pupils were asked to vote, by one-person-one-vote, for the 'King of The Trees'. The results are shown below.



(a) The 'King of the Trees' is _____ and the number of votes obtained is _____ .

1 mark (70)

(b) The number of types of trees for the pupils' voting is _____ .

1 mark (71)

(c) The total number of pupils taking part in the voting is _____ .

1 mark (72)

(d) Votes for Flame and Maple trees together make up _____ % of all the votes.

1 mark (73)

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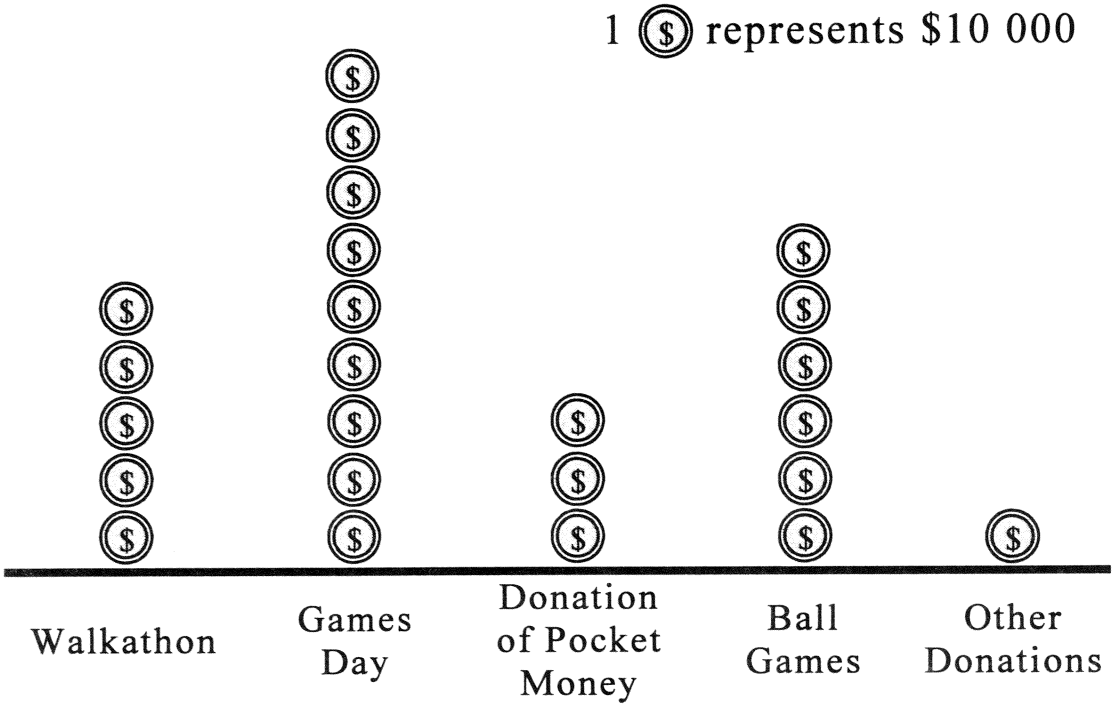
Marker's Use Only

41. Mathematics School held a fund-raising campaign this school year and various activities were organized. The results of the campaign were as follows.

Results of the Fund-Raising Campaign



(a) What was the total amount of funds raised in the campaign?

Answer: $ _____

1 mark (74)

(b) Which two activities raised a total of 50% of all the funds?

Answer: _____ and _____

1 mark (75)

(c) If you were the Principal, which two activities would you choose for the fund-raising activities next year? Why?

Answer: _____ and _____ ,

because_____

_____

_____ .

1 mark (76)

Marker's Use Only

42. Tom spent $880 on a video game. Father said, 'That's very expensive! It is 4 times the price of the first video game I bought you.' **Use the method of solving equation**, find the price of the first video game Tom's father bought him.

(Show your working)

1 mark (77)

1 mark (78)

1 mark (79)

— END OF PAPER —

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