* 6 M E 3 *

| 6 | M | E | 3 |
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# Education Bureau
# Territory-wide System Assessment 2011
# Primary 6
# Mathematics

## Instructions:

1. Stick barcode labels on pages 1, 3, 5, 7 and 9 in the spaces provided.
2. There are 42 questions in this test. Answer all questions.
3. Time allowed is 50 minutes.
4. Write your answers in this Question-Answer Booklet.
5. Do not write in the margins.
6. Use of calculators is not allowed.
7. Do your rough work on the rough work sheet provided.
8. Write your School Code, Class and Class Number in the boxes below.

**Instructions for answering questions:**

(a) Multiple choice questions – Blacken the circle next to the correct answer with an **HB pencil.** For example:

- ● A
- ○ B
- ○ C
- ○ D

(b) Questions in which you are asked to "Show your working" – Write your mathematical expressions, answers and statements/conclusions in the spaces provided. There is NO need to show your rough work.

(c) Other types of questions – Answer as required in the spaces provided.

| School Code 學校編號 | | | | Class 班別 | 6 | | Class No. 班號 | | |
|---|---|---|---|---|---|---|---|---|---|

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

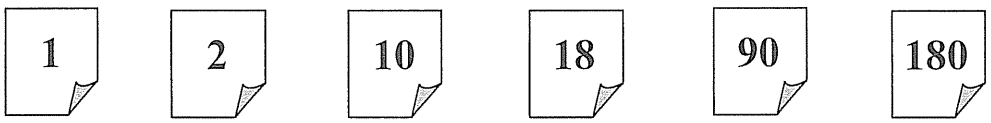
1. In the number 36 002, the digit '6' is in the

   ○ A. tens place.
   ○ B. hundreds place.
   ○ C. thousands place.
   ○ D. ten thousands place.

2. 28 is a factor of

   ○ A. 1.
   ○ B. 7.
   ○ C. 14.
   ○ D. 28.

3. Which of the following numbers are common factors of 10 and 18? (Circle all the answers)




4. (a) List all the common factors of 9 and 33.

   Answer: _____

   (b) The Highest Common Factor (H.C.F.) of 9 and 33 is _____ .

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5.  represents 1.

 represents ☐.

(Give the answer as a fraction)

6. Fill in each of the following boxes with the correct number.

(a) $\frac{4}{5} = \frac{\square}{35}$

(b) $\frac{22}{110} = \frac{2}{\square}$

7. Change 0.12 into a fraction and reduce it to the simplest form.

Answer: ☐

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8. Which of the following fractions is the smallest?

$$2\frac{2}{7} \quad , \quad 1\frac{2}{15} \quad , \quad 1\frac{2}{7}$$

Answer: ☐

9. In the number 309.64, what is the digit in the hundredths place?

- ○ A. '3'
- ○ B. '4'
- ○ C. '6'
- ○ D. '9'

10. $408 - 288 \div 12 =$ _____

11. $3\frac{1}{4} + 2\frac{5}{6} =$ ☐

12. $\frac{3}{10} \div 2\frac{2}{5} =$ ☐

13. $6.42 \div 1.6 =$ _____
(Correct the answer to two decimal places)

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14. Jane had \$360 pocket money. She spent $\frac{4}{5}$ of her pocket money on a toy and saved the remaining amount. How much did she save? (Show your working)

15. David ran $5\frac{3}{4}$ laps of the sports ground in 15.8 minutes. Which of the following expressions is most suitable to estimate the average time in seconds for David to finish one lap?

- ○ A. $15 \times 60 \div 5$
- ○ B. $15 \times 60 \div 6$
- ○ C. $16 \times 60 \div 5$
- ○ D. $16 \times 60 \div 6$

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16. A loaf of bread costs $13.80. A carton of milk costs $5.70. Kelvin buys a loaf of bread and a carton of milk.

(a) If Kelvin pays with 50-cent coins only, he should give _____ coins altogether.

(b) Give a disadvantage of paying with 50-cent coins only.
Answer: _____

_____

17.

**Happy Candy Shop**

50 g of peanut candies

sold at $19.90 only

How much should be paid for buying 300 g of peanut candies? (Show your working)

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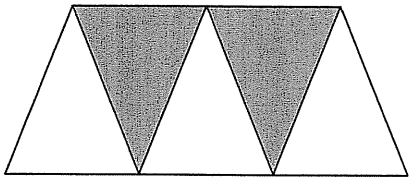
18. 

The shaded part of the figure above is _____ % of the whole.

19. (a) Change 29 % into a decimal.

Answer: _____

(b) Change 1.4 into a percentage.

Answer: _____ %

20. Vivian has 48 balloons. After 25% are given out, the remaining number of balloons is _____ .

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21. The ferry left the pier at 6:58 a.m. and reached the destination at 7:43 a.m.

(a) The ferry finished the whole journey

in _____ minutes.

(b) The average speed of the ferry was 40 km/h. How far did the ferry travel?
(Show your working)

22. Fill in each blank with a suitable unit of measurement.

(a) The height of a desk is about 750 _____.

(b) The capacity of a fish tank is about 50 _____.

(c) The weight of a baby is about 3 _____.

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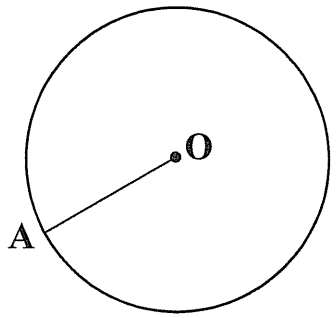
23. The figure on the right is a circle. **OA** is its radius.




(a) **O** is the _____ of the circle.

(b) Use a ruler to measure the length of **OA**.

Answer: The length of **OA** is about _____ mm.
(Give the answer as a whole number)

(c) The length of a diameter is _____ times the length of **OA**.

24. The diameter of a cylinder is 1 m.

A ribbon is 16 m long.

It goes round the cylinder _____ times at most.
(Give the answer as a whole number)

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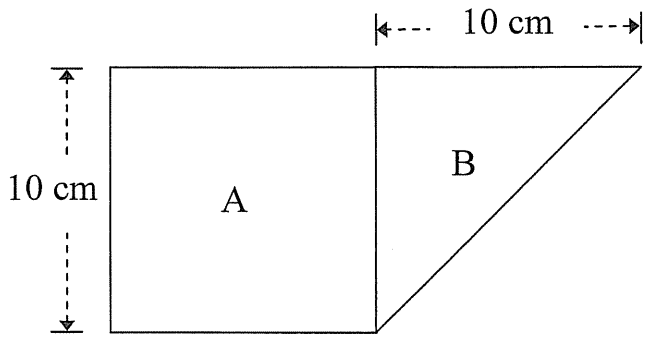
25.

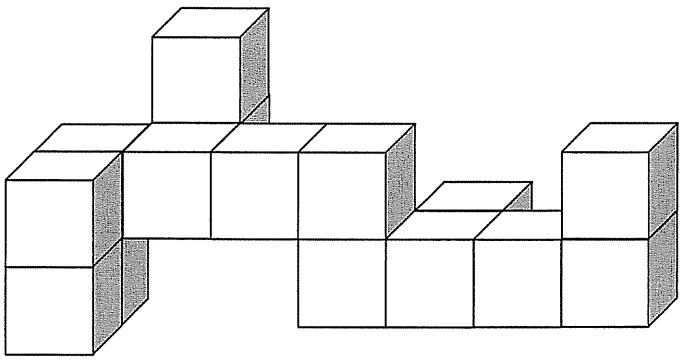


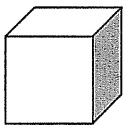

The trapezium above is made up of a square A and a right-angled triangle B.

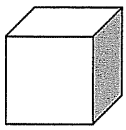
(a) The area of the square A is _____ $cm^2$.

(b) The area of the trapezium is _____ $cm^2$.

26.



The solid shown above is made up of  .

The volume of each  is 1 $cm^3$. The volume of the solid is _____ . (Give the answer with a unit)

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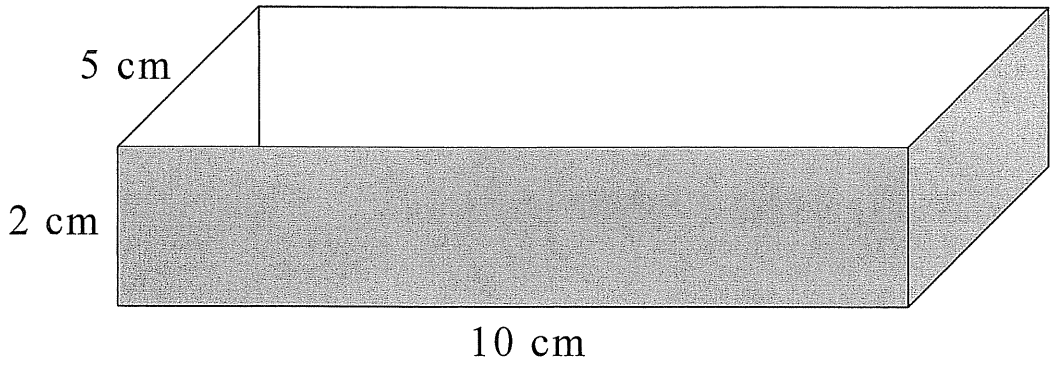
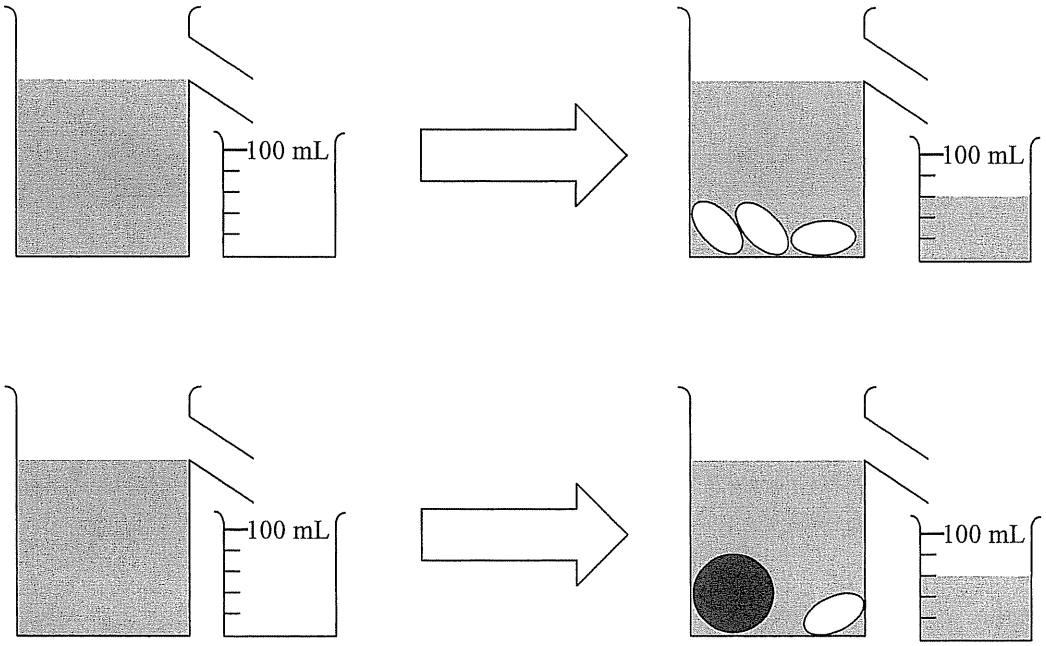
27.




The capacity of the above rectangular container is _____ L.

28.




According to the information above, the volume of ● is _____ $cm^3$.

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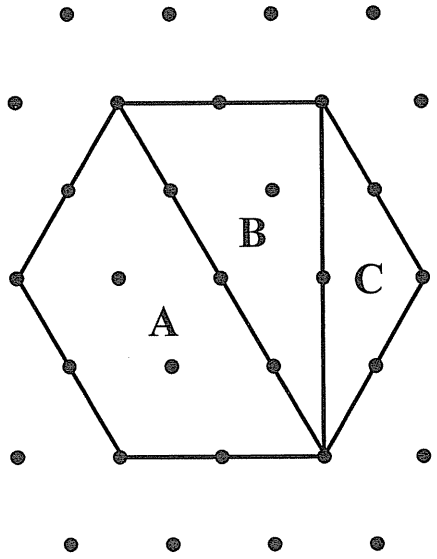
29. A car left City A at 1:00 p.m. It reached City B at 5:00 p.m. The distance between the two cities was 280 km. The average speed of the car was _____ km / h.

30. A quadrilateral with ***only*** one pair of opposite sides parallel is a _____ .

31.




The hexagon above is formed by three 2-D shapes A, B and C. The hexagon has equal sides.

(a) Shape A is a * parallelogram / trapezium / rectangle.

(*Circle the answer)

(b) Shape B is * an isosceles / an equilateral / a right-angled triangle. (*Circle the answer)

(c) Shape C is * an isosceles / an equilateral / a right-angled triangle. (*Circle the answer)

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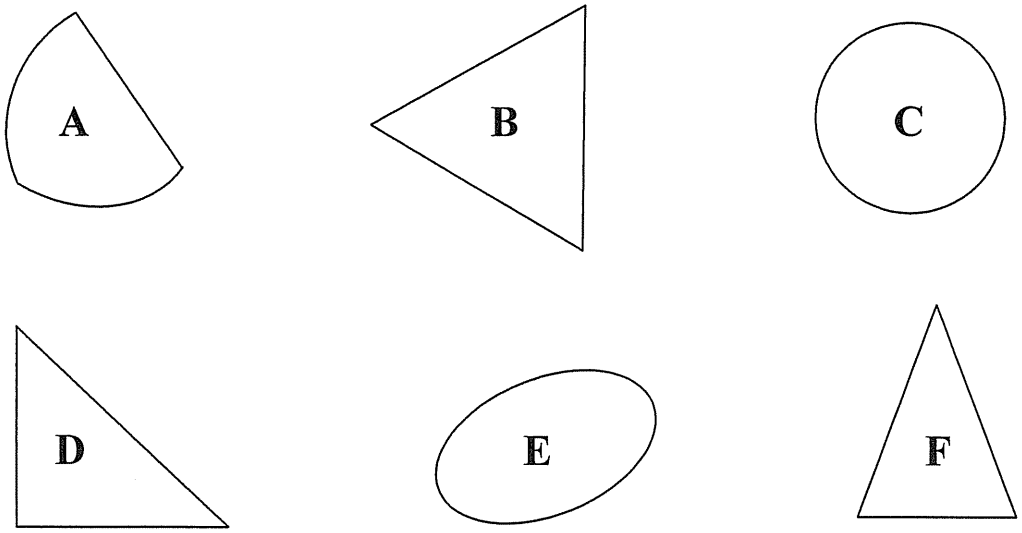
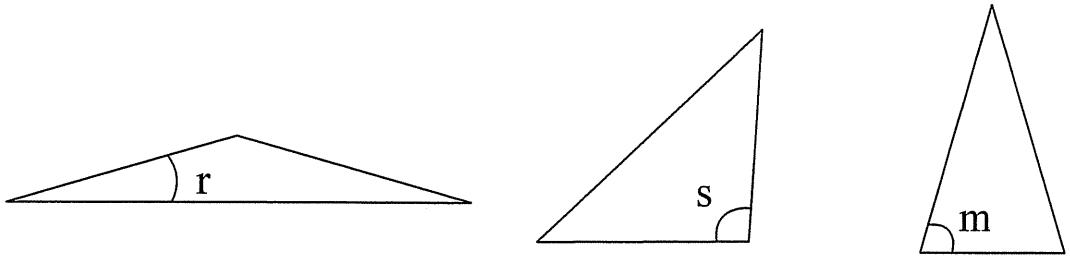
32. Study the following 2-D shapes. Write the letter(s) for the answers.




(a) Circle: _____

(b) Equilateral triangle: _____

33. In the figures below, arrange the angles r, s and m from the largest to the smallest.




Answer: _____ , _____ , _____
(Largest) (Smallest)

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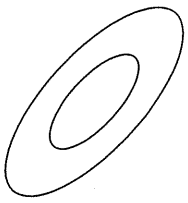
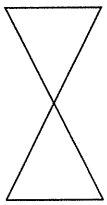
34. Study the 2-D figures below.

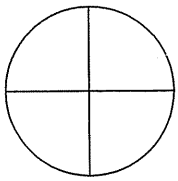
(a) The figure below has * straight line(s) / curve(s) / parallel lines / perpendicular lines.
(*Circle all the answers)



(b) The figure below has * straight line(s) / curve(s) / parallel lines / perpendicular lines.
(*Circle all the answers)



(c) The figure below has * straight line(s) / curve(s) / parallel lines / perpendicular lines.
(*Circle all the answers)



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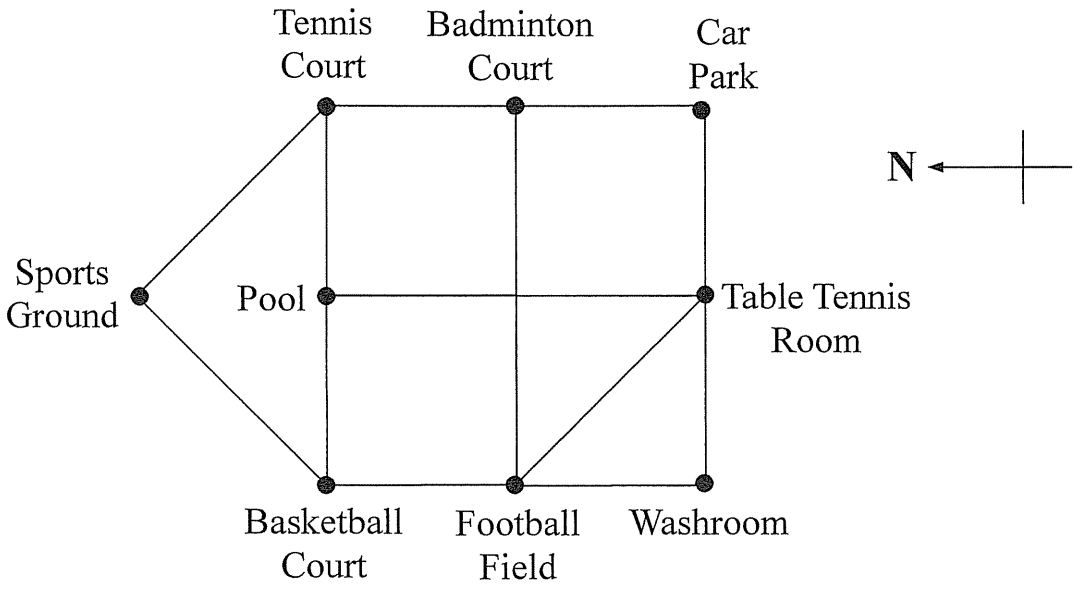
35. The Map of Sports Facilities




(a) Peter goes from Sports Ground to Badminton Court.

He first goes _____ to Tennis Court,
(direction)

then turns _____ to reach Badminton Court.
(direction)

(b) Wincy goes from Car Park to Football Field.

She goes west to _____ and then turns

_____ to reach Football Field.
(direction)

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36. Which of the following stands for '$p$ is divided by 4 and then plus 2'?

- ○ A. $\frac{p}{4+2}$
- ○ B. $\frac{p}{4}+2$
- ○ C. $\frac{p+2}{4}$
- ○ D. $\frac{4}{p}+2$

37. $50n = 3$

$n =$ ☐

38. $6k + \frac{2}{3} = 1\frac{1}{3}$

$k =$ ☐

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39. A number times 15 and then minus 8 equals 127. Find the number by the ***method of solving an equation***.

(Show your working)

40. Calculate the average of the five numbers below.

$$20 \quad , \quad 19.5 \quad , \quad 100 \quad , \quad 10\frac{1}{2} \quad , \quad 100$$

Answer: The average is _____ .

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41. The following pictogram shows the number of different types of vehicles parked in Grand Car Park yesterday.

**Number of Different Types of Vehicles Parked in Grand Car Park Yesterday**

Each  stands for 10 vehicles

| | |
|---|---|
| Private Car |  |
| Motorcycle |  |
| Lorry |  |
| Taxi |  |
| Van |  |

(a) Among the five types of vehicles parked in Grand Car Park yesterday, _____ was the fewest. The number of the fewest type was _____ only.

(b) Same number of _____ and _____ were parked in Grand Car Park yesterday.

(c) The total number of vehicles parked in Grand Car Park yesterday was _____ .

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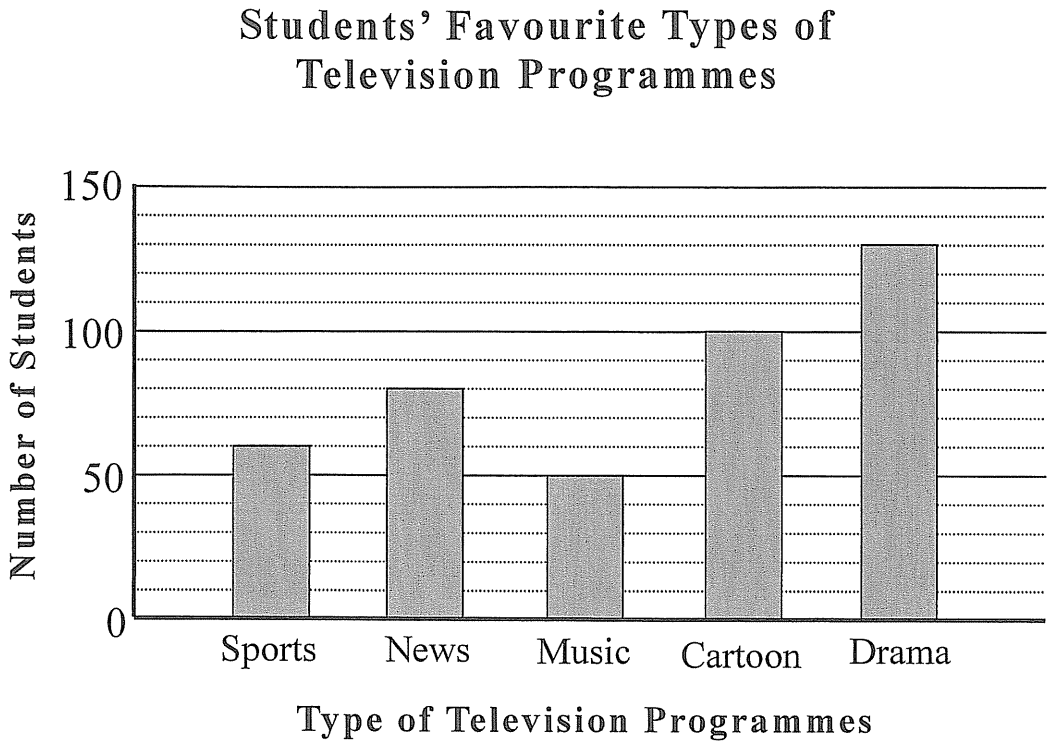
42. A school studied students' favourite types of television programmes. Each student chose one type of programmes only.




According to the bar chart above,

(a) The number of students who liked News was _____ .

(b) The most popular type of television programmes was _____ .

(c) The total number of students taking part in the study was _____ .

— END OF PAPER —

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