* 6 M E 3 *

6	M	E	3

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Education Bureau
Territory-wide System Assessment 2012◈
Primary 6
Mathematics

Instructions:

1. Stick barcode labels on pages 1, 3, 5, 7 and 9 in the spaces provided.
2. There are 43 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		

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

◈2012 年小六全港性系統評估暫停舉行。此評估是學校以自願形式參與，而非全體小六學生參與的全港性系統評估。
The 2012 P6 TSA has been suspended. Participation in the 2012 P6 TSA is on a voluntary basis. As a result, this is a TSA in which not all P6 students will participate.

1. Which of the following numbers is a multiple of 24?

   ○ A. 6
   ○ B. 12
   ○ C. 36
   ○ D. 48

2. In the number 24 680, the digit '6' is in the _____ place.

3. Which of the following numbers are common multiples of 6 and 16? (Circle all the answers)

   1 **2** **48** **60** **96**

4. (a) List all the common factors of 16 and 44.

   Answer: _____

   (b) The Highest Common Factor (H.C.F.) of 16 and 44 is _____ .

5. Which of the following fractions has its value nearest to 1?

   $1\frac{1}{2}$, $1\frac{1}{3}$, $1\frac{1}{4}$

   Answer: ☐

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

(a) $\frac{7}{9} = \frac{28}{\square}$

(b) $\frac{105}{63} = \frac{\square}{3}$

7. Change 2.08 into a fraction and reduce it to the simplest form.

Answer: ☐

8. Which of the following fractions is the smallest? (Circle the answer)

$\frac{11}{18}$, $\frac{7}{12}$, $\frac{7}{18}$

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9. In the number 329.015, the digit in the tenths place is _____ .

10. $1\frac{2}{3} + 4\frac{3}{5} =$ ☐

11. $10 \div 4 \times 24 =$ _____

12. $\frac{3}{7} \times 1\frac{5}{9} =$ ☐

13. $20 \times 2.4 \times 0.6 =$ _____

14. The pork was sold at \$56 per kilogram. Mother bought $1\frac{1}{8}$ kg of pork. She paid with a \$100 note. How much change did she receive?
(Show your working)

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15. Which of the following expressions is most suitable for estimating the value of $4.9 \div \frac{1}{4} - 6\frac{11}{12}$?

○ A. $5 \times 4 - 6$

○ B. $5 \times 4 - 7$

○ C. $5 \div 4 - 6$

○ D. $5 \div 4 - 7$

16.

Food Price	
Hamburger	$12.60
Hotdog	$9.60
Toast	$8.90
Sandwich	$11.40

(a) Tony has $44. After buying a hamburger and a sandwich, how much money has he left?

Answer: He has $ _____ left.

(b) Ben has $20. Which of the following can he buy? (Circle the answer)

A toast and a sandwich / Two hotdogs / Two hamburgers

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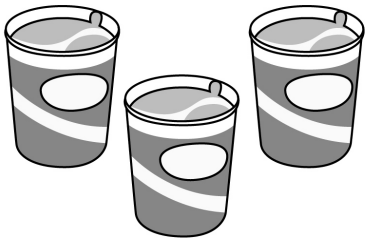
17.



Ice cream
$22.80 for 3 cups

Ice lolly
$5.70 each

How much more expensive is 1 cup of ice cream than 1 ice lolly? (Show your working)

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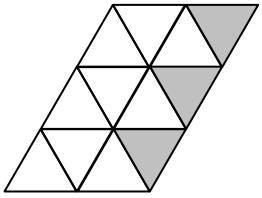
18. 

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

19. (a) Change 109 % into a decimal.

Answer: _____

(b) Change 2.002 into a percentage.

Answer: _____ %

20. The original price of a television is $8 500. At a discount of 30%, its selling price is $ _____ .

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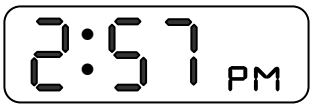
21.

Raymond took part in a speed skating competition. He started at 

and finished at

.

(a) It took him _____ minutes to finish the competition.

(b) Raymond skated for a distance of $4\frac{1}{2}$ km. Find his average speed. (Show your working)

22. The circumference of a circle is about _____ times its diameter. (Give the answer as a whole number)

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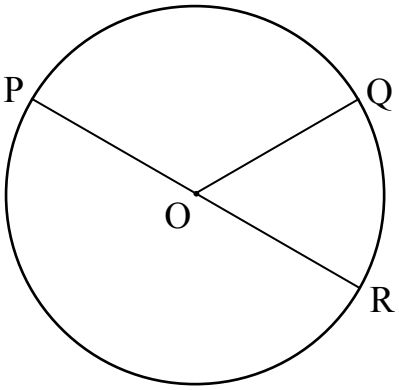
23. In the diagram below, O is the centre of the circle.



(a) The straight line _____ is a diameter of the circle.

(b) Use a ruler to measure the length of a radius of the circle.

Answer: The length of a radius is _____ cm.

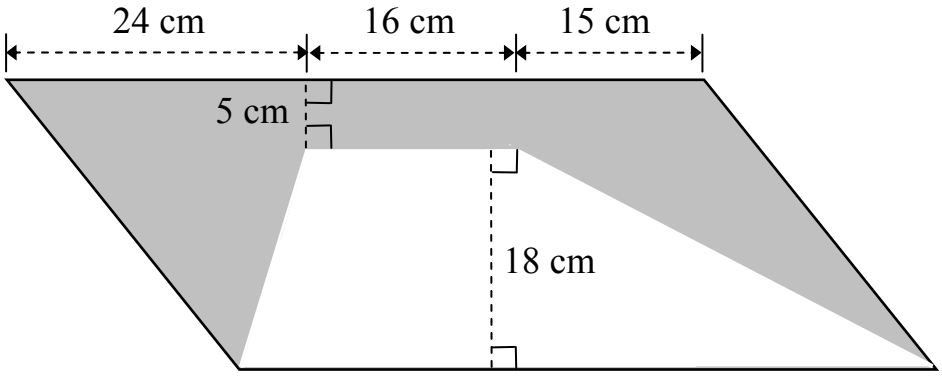
24. Fill in each blank with a suitable unit of measurement.

(a) A bag of family-sized cotton wool weighs about 80 _____.

(b) The height of a stack of six $2 coins is about 12 _____ .

(c) The capacity of a distilled water bottle is about 20 _____.

25.

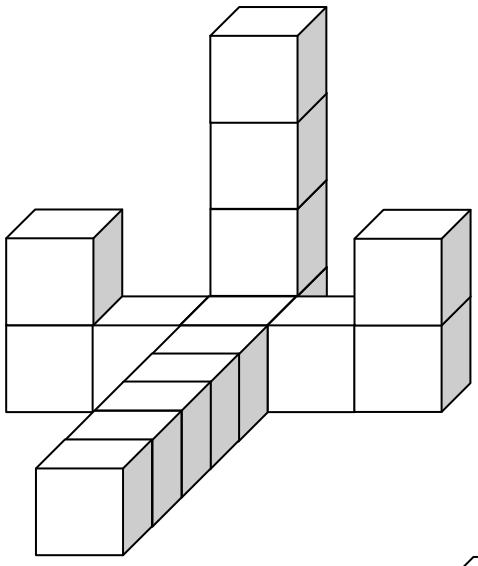


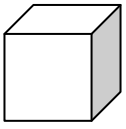
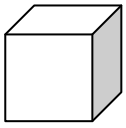
The above figure is a parallelogram.

(a) Its area is _____ cm^2.

(b) The area of the shaded part 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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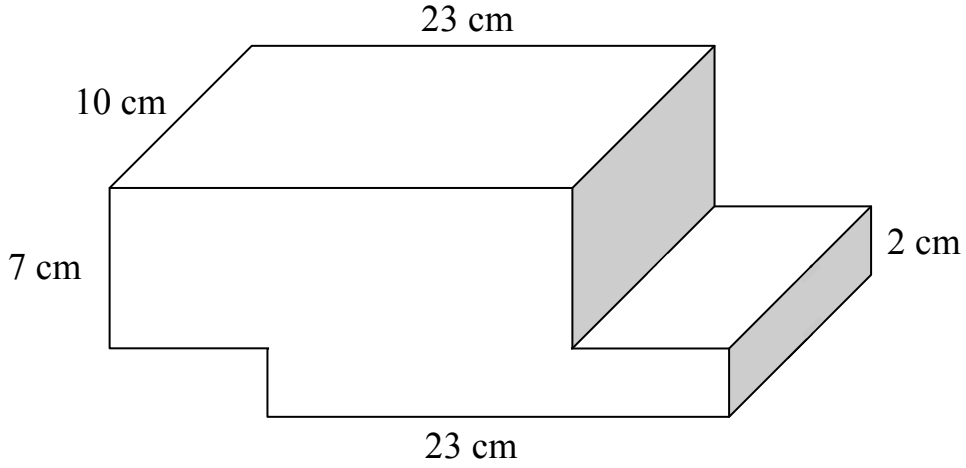
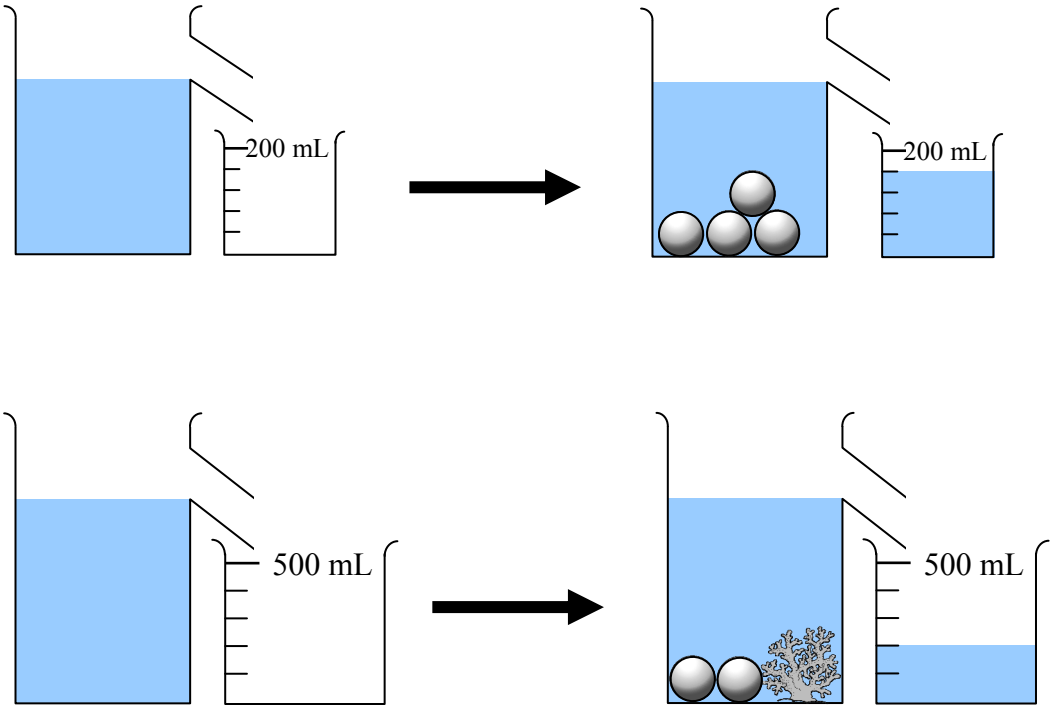
27.



The volume of the solid above is _____ cm^3.

28.



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

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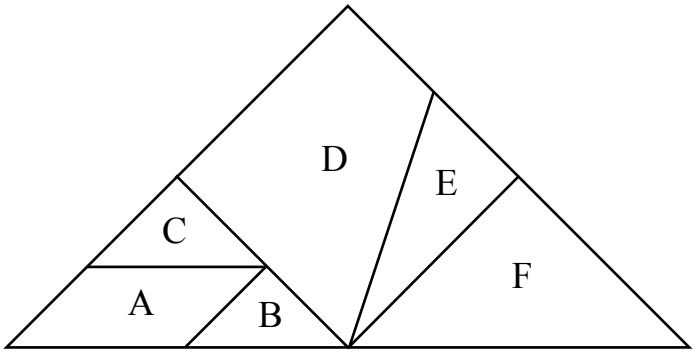
29. A bus departed from a bus stop to the airport at twenty-six minutes to eleven in the morning and reached the airport at fourteen minutes past twelve in the afternoon. The average speed of the bus is 45 km/h.

The whole journey is _____ km.

30. Which of the quadrilaterals below has two pairs of opposite sides parallel, two pairs of opposite sides equal and four angles equal ?

- ○ A. Rhombus
- ○ B. Rectangle
- ○ C. Trapezium
- ○ D. Parallelogram

31.



The triangle above is formed by six 2-D shapes A, B, C, D, E and F.

(a) Shape A is a _____ .

(b) Shape D is a _____ .

(c) Shape E is a/an _____ triangle.

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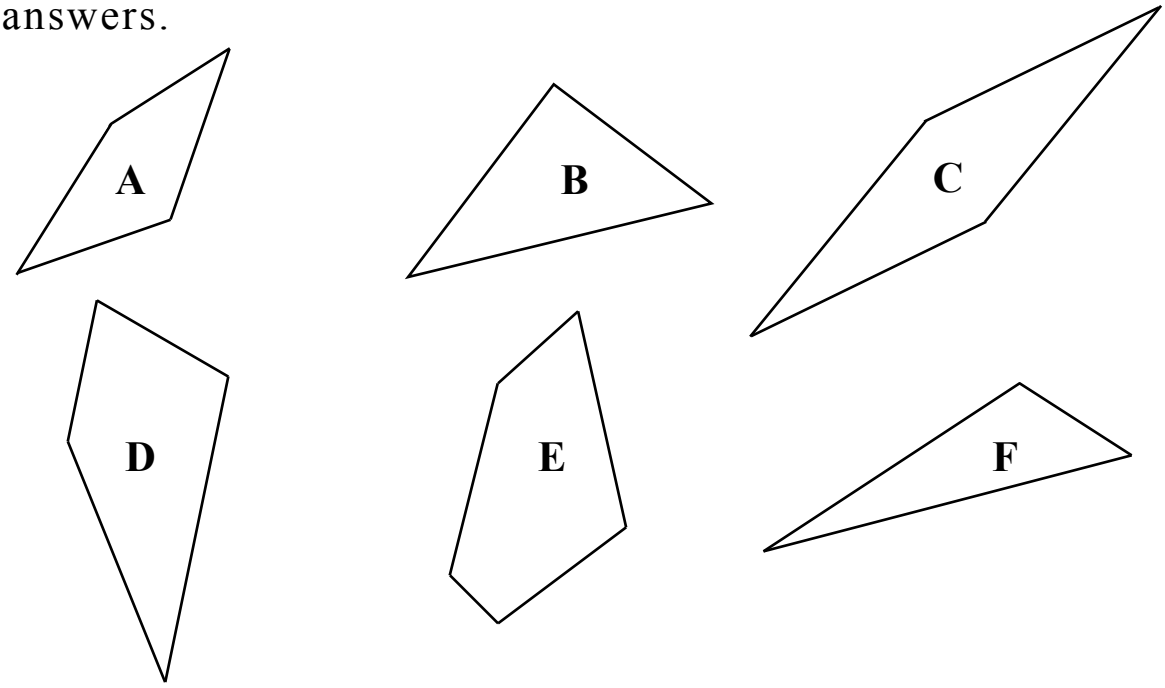
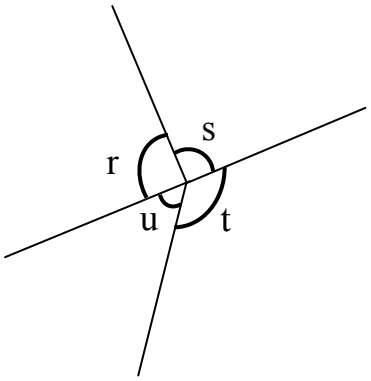
32. Study the following 2-D shapes. Write the letters for the answers.



(a) Trapezium(s): _____

(b) Right-angled triangle(s): _____

33.



(a) The right angle(s) shown in the figure above is/are

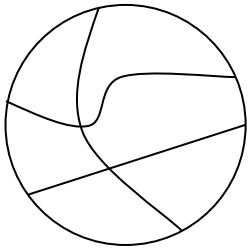
* r / s / t / u . (*Circle the answer(s))

(b) Arrange the three angles r, t and u from the largest to the smallest.

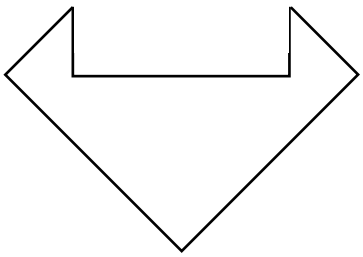
Answer: _____ , _____ , _____
(Largest) (Smallest)

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)



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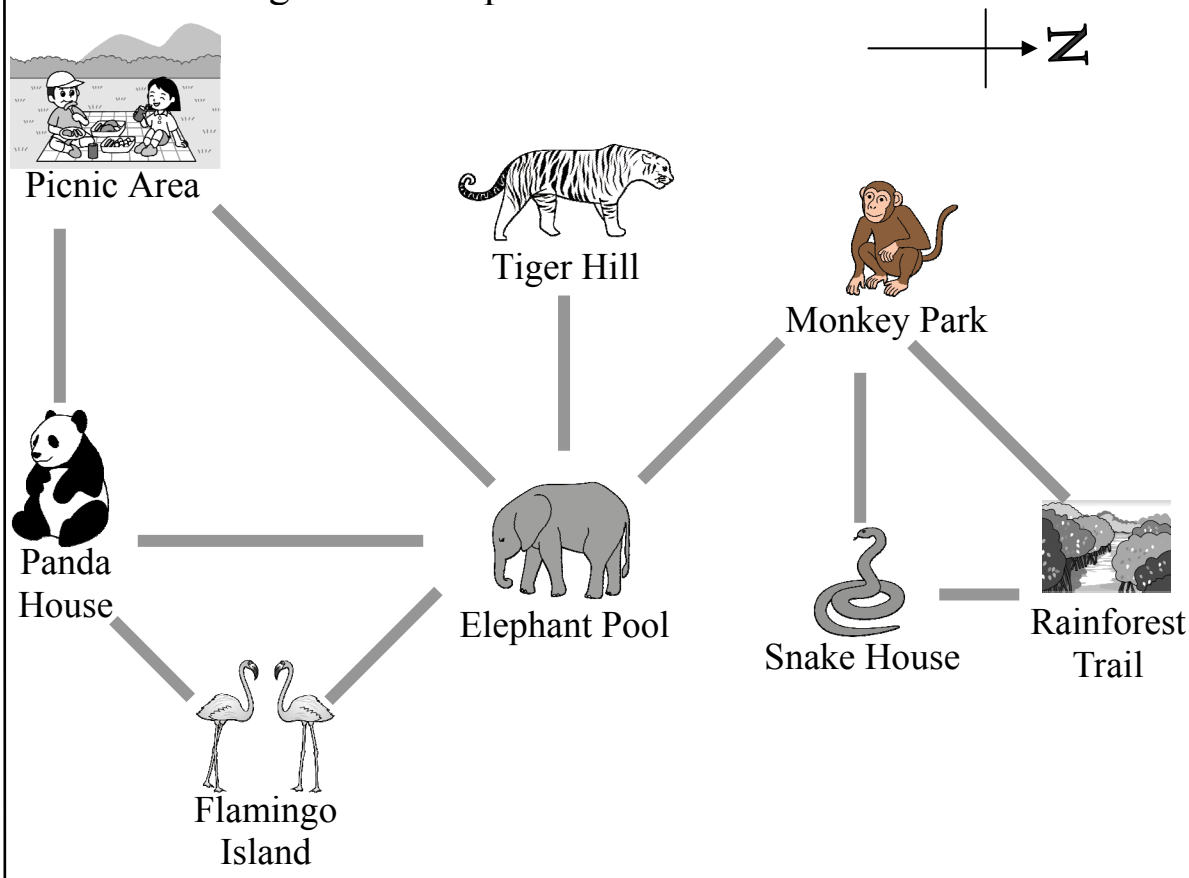
35. The following is the map of a zoo.



(a) Panda House is to the south-west of _____ .

(b) Wendy goes from Picnic Area to Monkey Park.
She goes _____ to Elephant Pool, and
(direction)

then turns _____ to reach Monkey Park.
(direction)

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36. There were 38 roses in a flower shop. After k roses were sold, ☐ roses were left.

37. $19 = 27 - M$

$M =$ ☐

38. $40y = 5$

$y =$ ☐

39. Which of the following are equations? Write the letters for the answer.

A. $9 \times 3 = 27$

B. $6.4 + 2K = 10$

C. $4a > 20$

D. $33 - 6A$

E. $5 \times (B + 4) = 30$

Answer: _____

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40. Mother paid \$888 for 4 adult tickets and 1 child ticket for Hippo Park. The price of each child ticket is \$104. By the method of solving an equation, find the price of each adult ticket.
(Show your working)

41. Find the average of the five numbers below.

$12\frac{1}{5}$, 16.8 , 4.1 , 8.9 , 3

Answer: The average is _____ .

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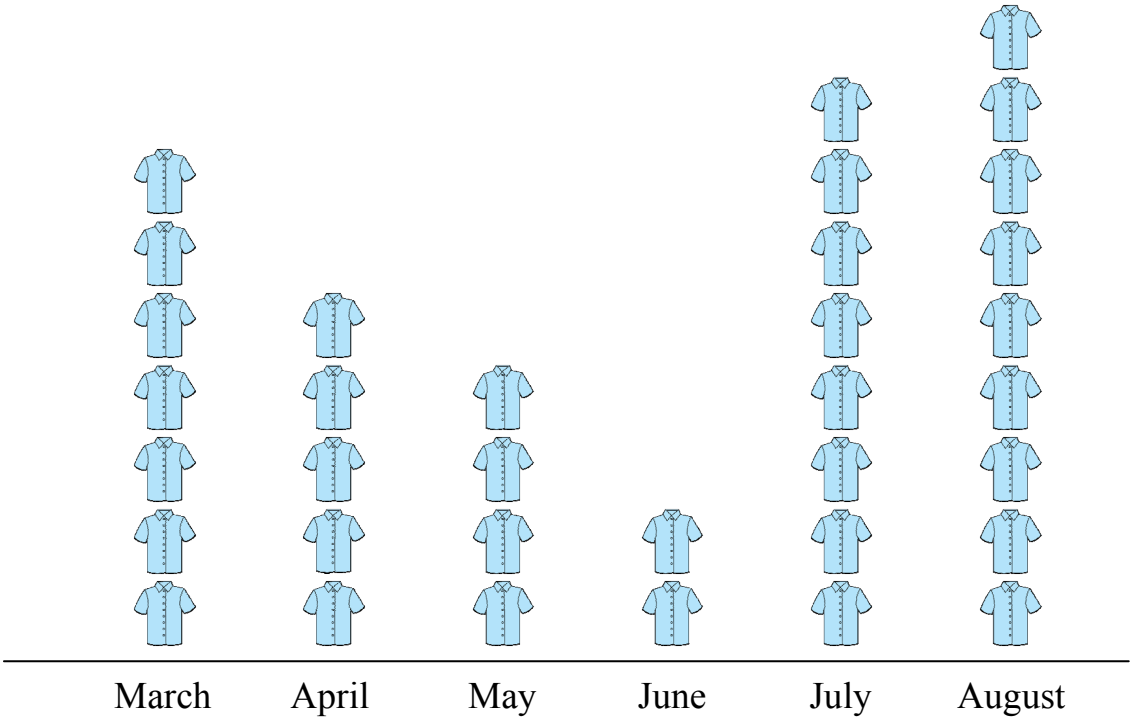
42. The following pictogram shows the number of school uniforms sold in Happy Shop from March to August.

Number of School Uniforms Sold in Happy Shop from March to August

Each stands for 100 school uniforms



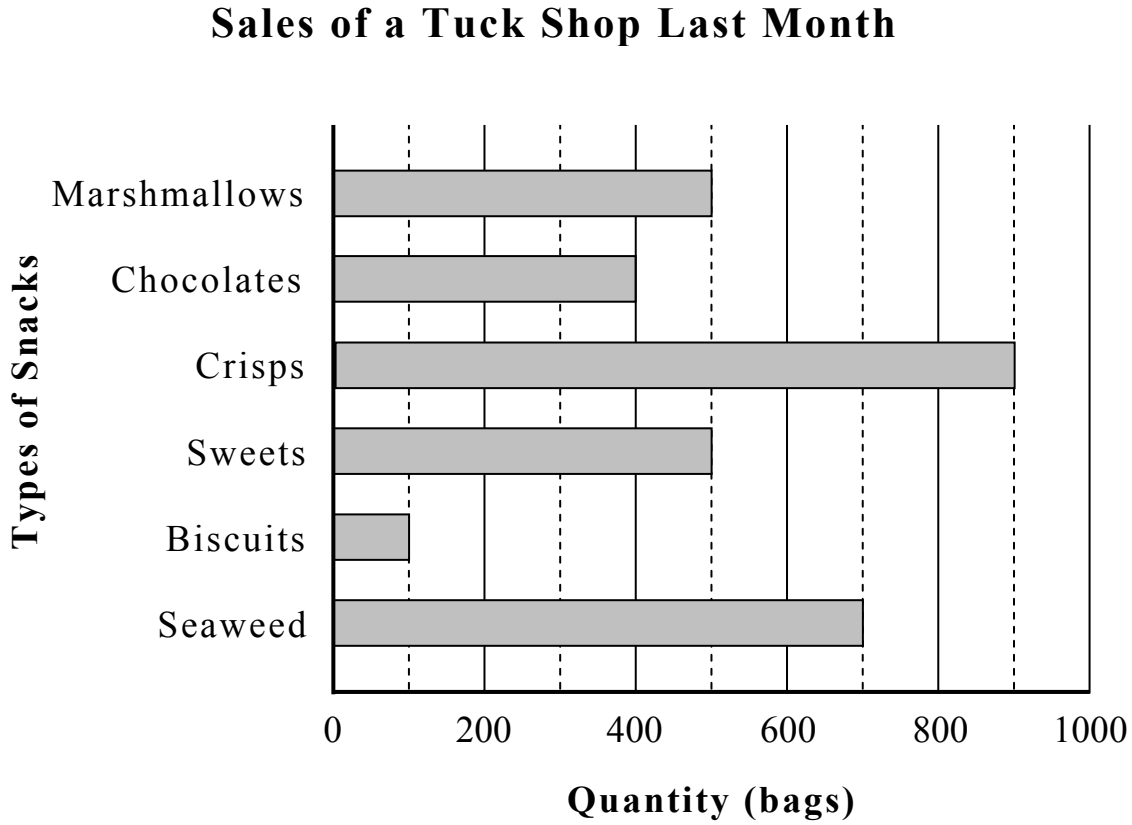
(a) The number of school uniforms sold in _____ (month) was the largest. _____ school uniforms were sold in that month.

(b) The number of school uniforms sold in July was _____ times as many as the number of school uniforms sold in June.

(c) Express the number of school uniforms sold in April as a fraction of the total number of school uniforms sold.

Answer: The number of school uniforms sold in April was ☐ of the total.

43. The following bar chart shows the sales of a tuck shop last month.



(a) The snack with the highest sale was _____ . _____ bags were sold.

(b) The sale of biscuits was _____ % of the sale of chocolates.

(c) The shopkeeper wants to stop selling one of the snacks. According to the bar chart above, which one should he choose? Why?

Answer: He should choose _____ because

_____

_____ .

— END OF PAPER —

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2012-TSA-MATH-6ME3-20