

# THINKING MATHEMATICS WORKBOOK 2

2B



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# Contents

<b>Time</b>	<b>1</b>
Exercise one	1
Exercise two	4
Exercise three	8
<b>Picture Graphs</b>	<b>12</b>
Exercise one	12
Exercise two	16
Exercise three	21
<b>Shapes and Patterns</b>	<b>24</b>
Exercise one	24
Exercise two	26
Exercise three	29

----- Exercise three 50

----- Exercise two 47

----- Exercise one 43

**43**

**Let's Revise!**

----- Exercise three 41

----- Exercise two 39

----- Exercise one 37

**37**

**Lines, Curves and Surfaces**

# TIME

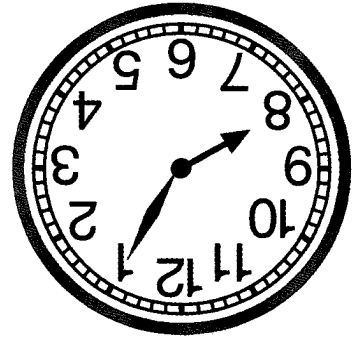
## Exercise one



1. 7 children are taking their music test one by one in turn. Each clock shows the time when each child starts. Write the time.

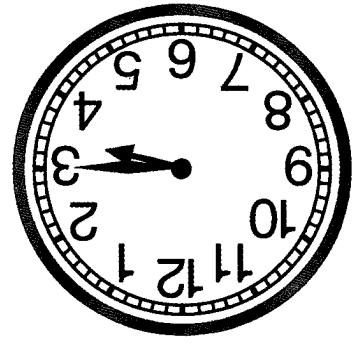

2. Fill in the blanks.

(a)



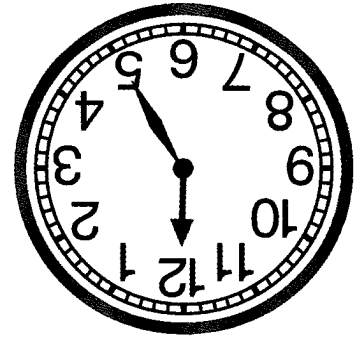
The time is \_\_\_\_\_ a.m.

(b)



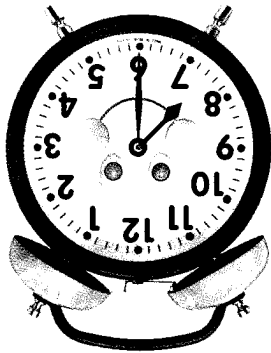
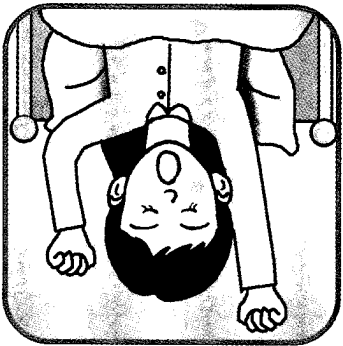
The time is \_\_\_\_\_ p.m.

(c)

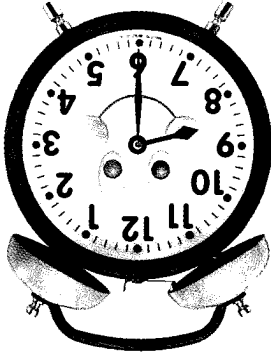


The time is \_\_\_\_\_ p.m.

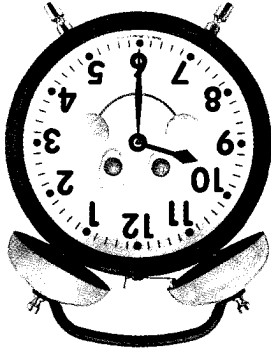
3. The pictures show what Ann does every Sunday. Write the time for each activity.



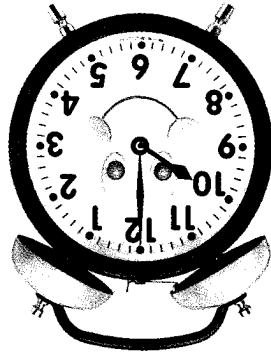
(a)



(b)



(c)



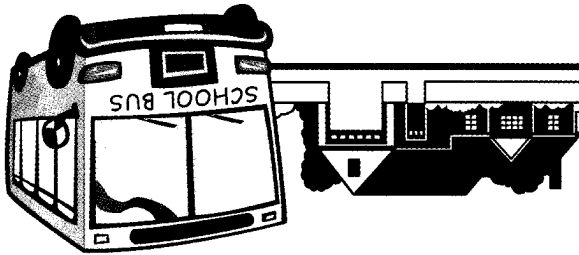
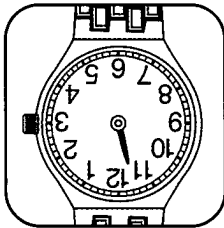
(p)

## Exercise two

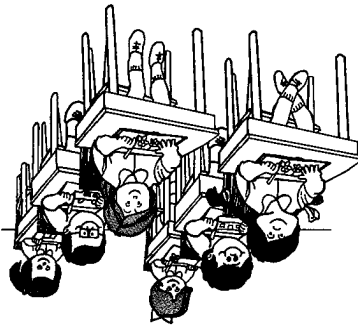
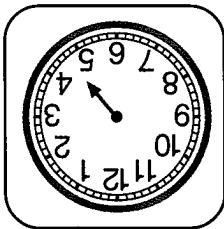


1. Draw the minute hand on each clock to show the correct time.

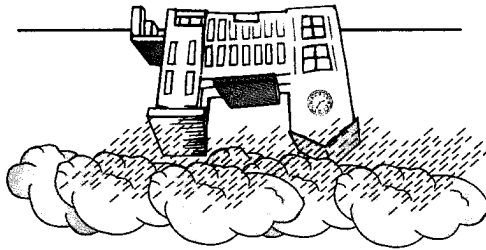
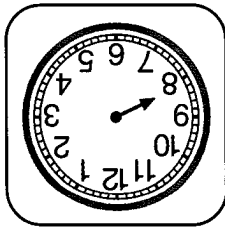
(a) The school bus arrives at 11.30 a.m.



(b) The children begin their Art lesson at 4.45 p.m.

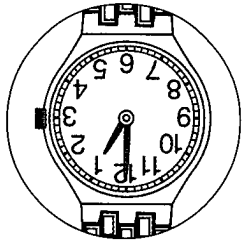
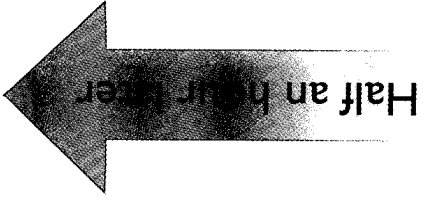
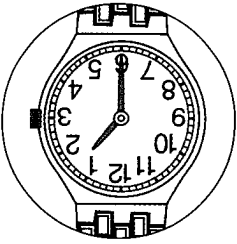


(c) It starts to rain at 8.10 p.m.

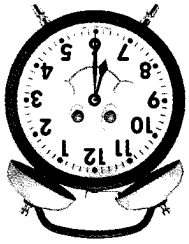
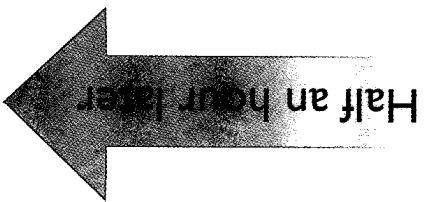
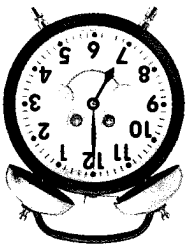




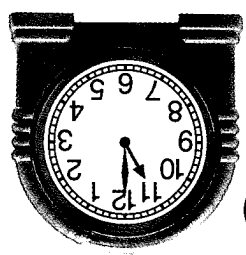
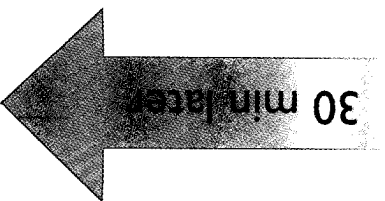
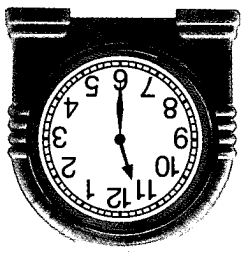
2. Look at the times on the pictures. Write the time.



(a)

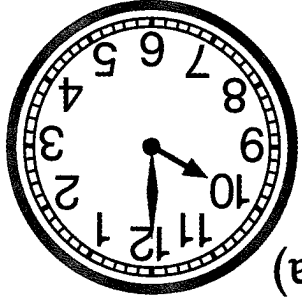


(b)

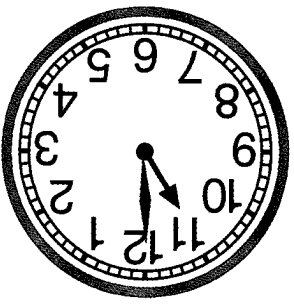
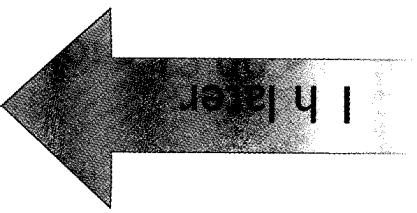


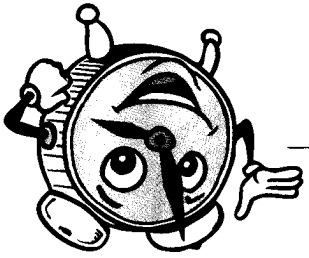
(c)

3. Fill in the blanks.



(a)



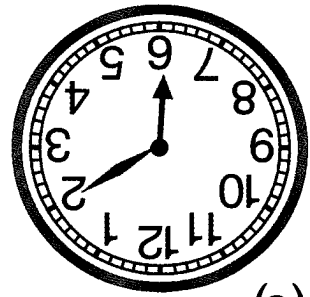


(c) 1 hour before 12.00 p.m.: \_\_\_\_\_

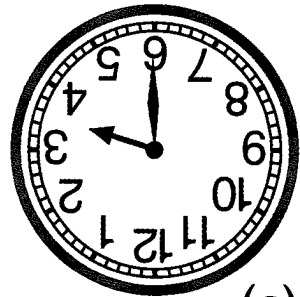
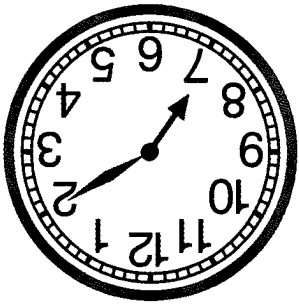
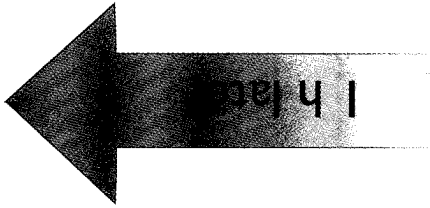
(b) Half an hour after 7.30 p.m.: \_\_\_\_\_

(a) 1 hour after 3 p.m.: \_\_\_\_\_

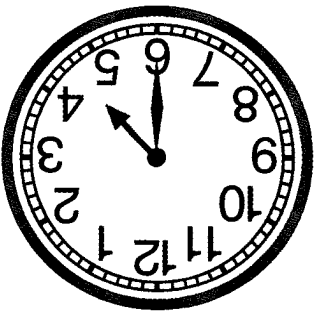
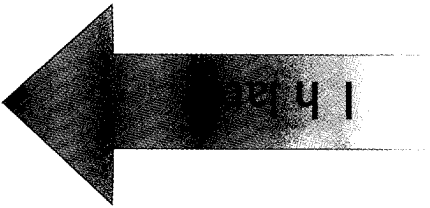
4. Write the following time.



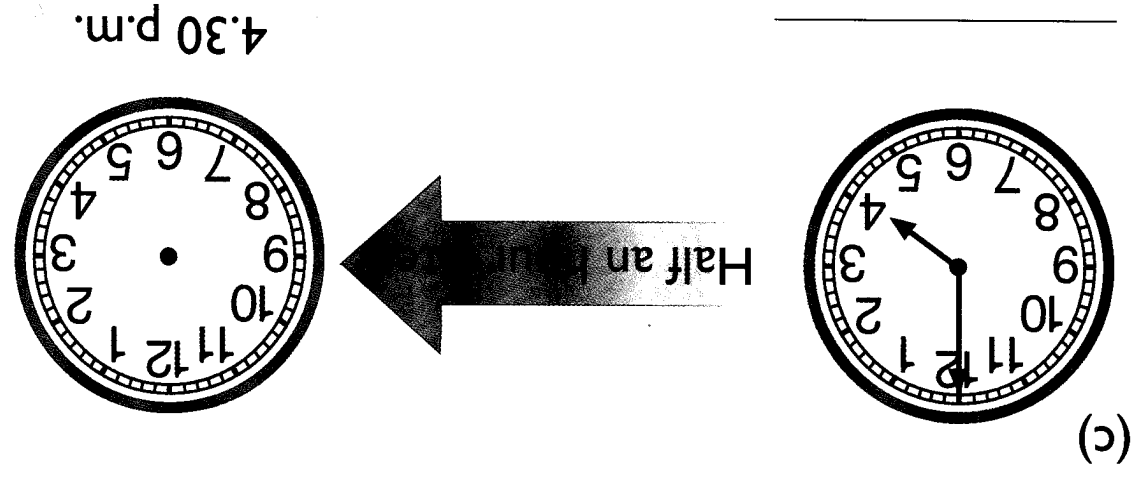
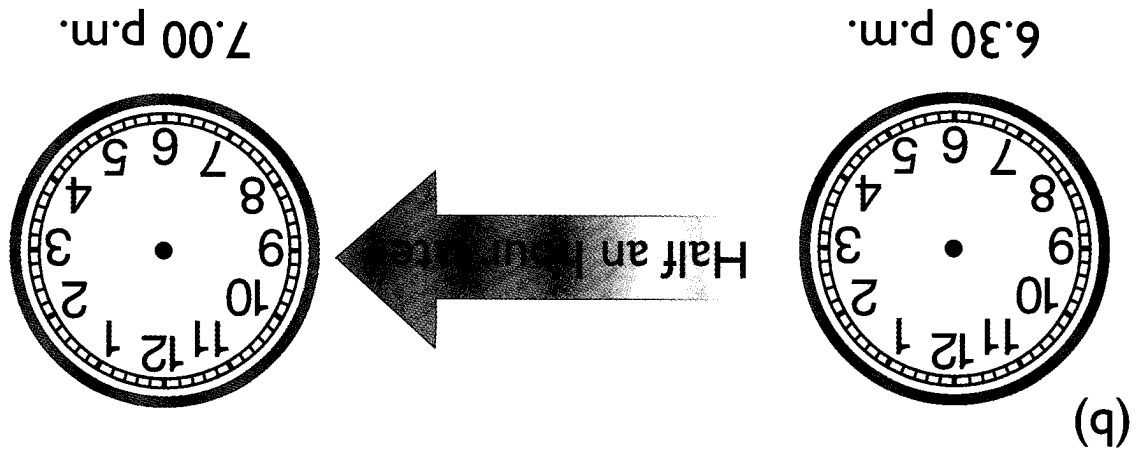
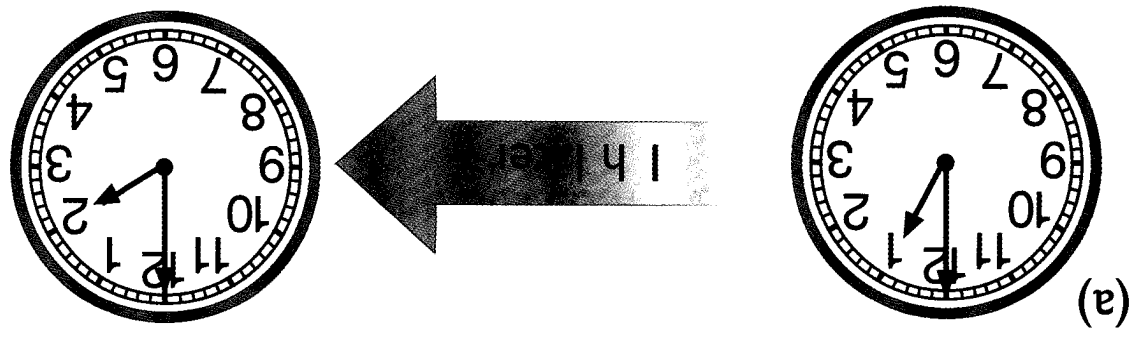
(c)

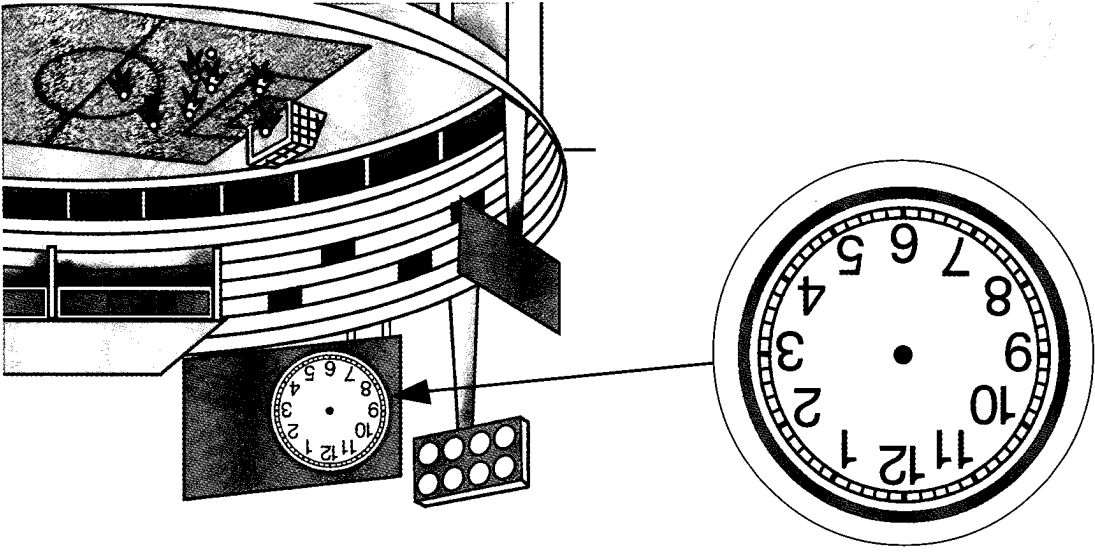


(b)

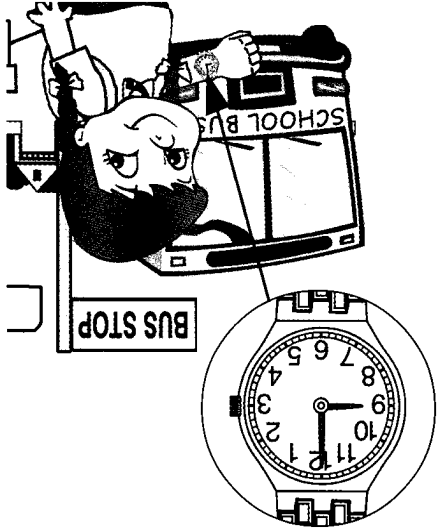


5. Look at the picture carefully and fill in the missing parts.





2. It is now 4.15 p.m. A soccer match will start at 7.15 p.m. Draw the missing hands on the clock.



The bus came at \_\_\_\_\_ a.m.

1. Judy arrived at the bus-stop at 8.30 a.m. and waited there for her bus. The bus came 30 minutes later. At what time did the bus come?

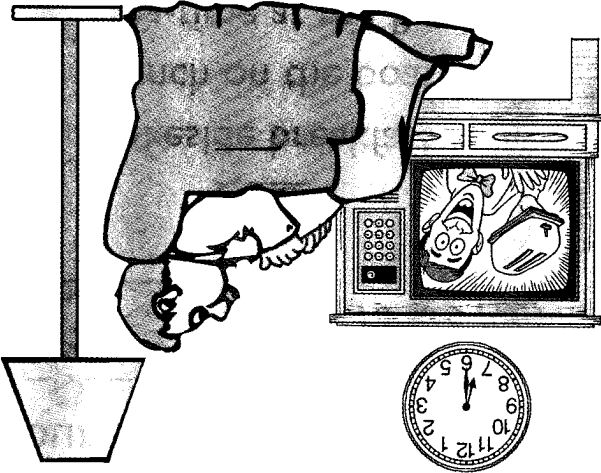
**Exercise three** 

3. Mr. Young wants to watch the news on television that is starting in 30 minutes. The time is now 6.00 p.m. What time will the programme start?

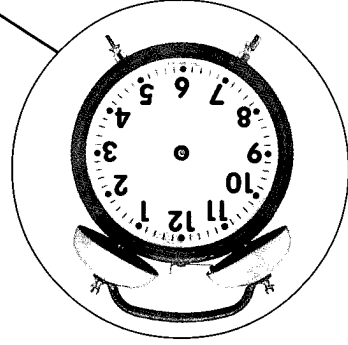
The programme will start at

\_\_\_\_\_ p.m.

6.00 p.m. is half an hour  
\_\_\_\_\_ 6.30 p.m.

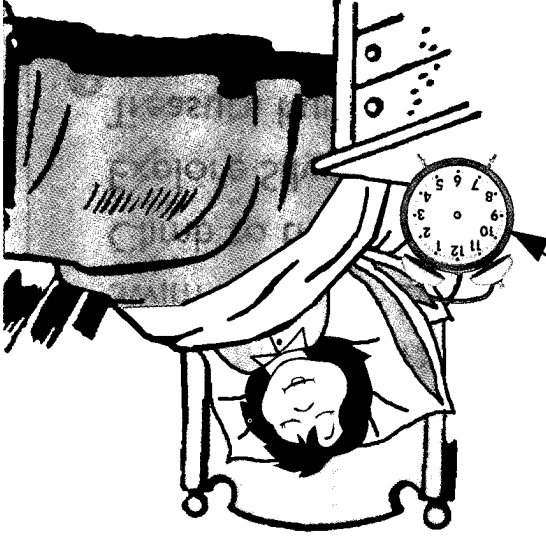


4. Elizabeth reads a story-book at 8.00 p.m., which is 1 hour before her bed-time. At what time does Elizabeth go to sleep? Draw the missing hands on the alarm clock.

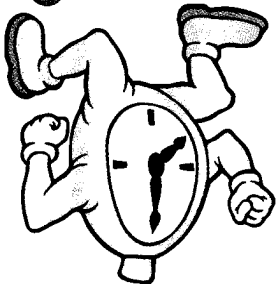


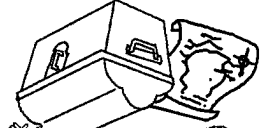
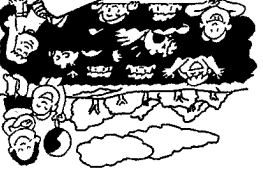







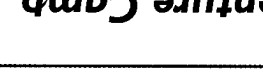

Elizabeth goes to sleep  
at \_\_\_\_\_ p.m.

9.00 p.m. is 1 hour  
\_\_\_\_\_ 8.00 p.m.



Suppose you have been invited to a one-day adventure camp. Choose activities from the poster and plan your time-table for the day.



**Things To Do At The Adventure Camp**

**Meals**

Lakeside breakfast 1 hour

Lunch on the boat 1 hour

Tea-time at the Rock Vale 1 hour

Dinner at the log cabin 1 hour

**Activities**

Find your way: map reading  $\frac{1}{2}$  hour

Help yourself: practical first aid  $\frac{1}{2}$  hour

Morning jog around Stone Circle  $\frac{2}{2}$  hour

Bicycle ride along the Nature track 1 hour

Canoe along Short River 1 hour

Quiz time and prize-giving (at 4 p.m. only) 1 hour

Swim in Mirror Lake 1 hour

Climb to the top of Green Hill 2 hours

Explore Silver Forest 2 hours

Treasure hunt (at 5 p.m. only) 2 hours



Write the things you would like to do according to the times on your timetable. You may put more than one activity in each box.

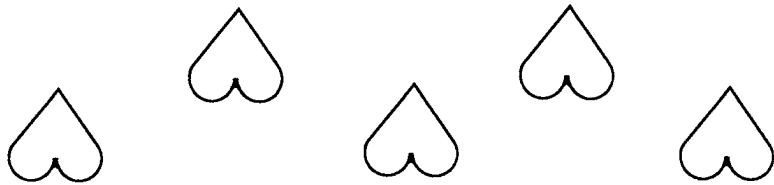
My Adventure Camp Timetable	
8.00 a.m.	1.00 p.m.
9.00 a.m.	2.00 p.m.
10.00 a.m.	4.00 p.m.
11.00 a.m.	5.00 p.m.
12.00 p.m.	7.00 p.m.
	dinner at the log cabin


# Picture Graphs

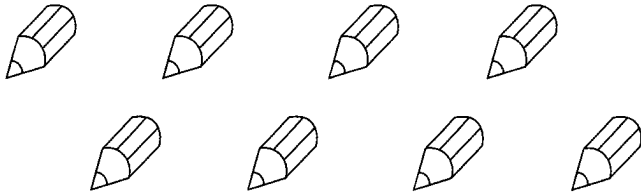
## Exercise one









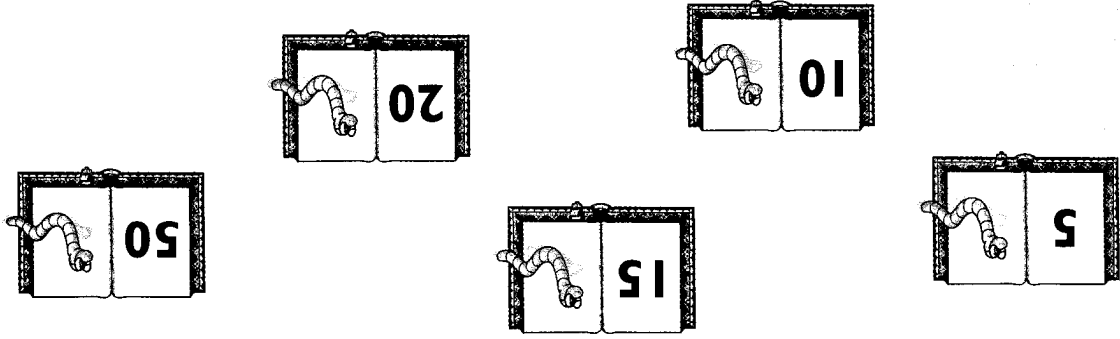
1. If one  stands for 3 stickers, how many  will stand for 9 stickers? Color the correct number of hearts.



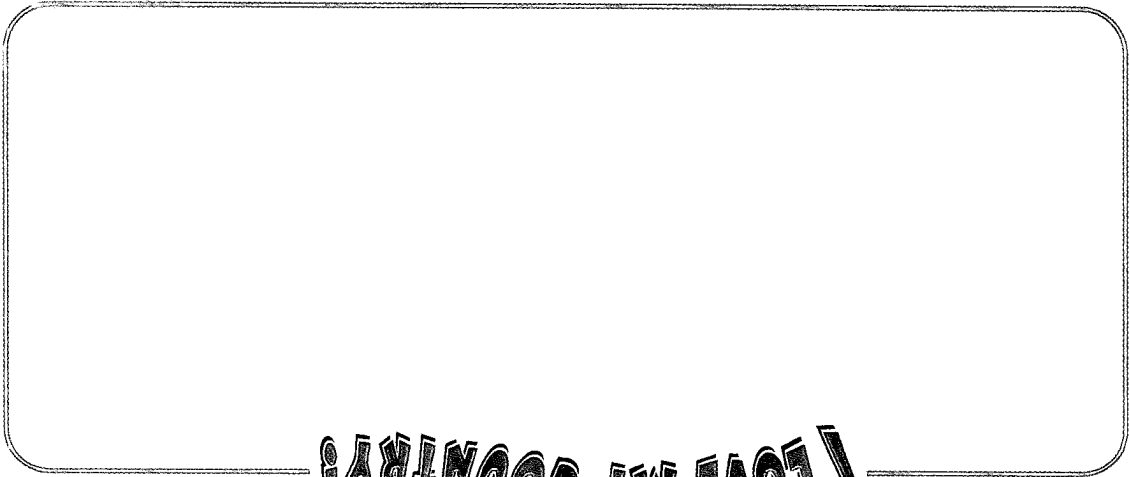
2. Each  stands for 10 pencils. Color the correct number of pencils to stand for 60 pencils.




3. Each  stands for 4 books. How many books do      stand for? Circle the correct answer:

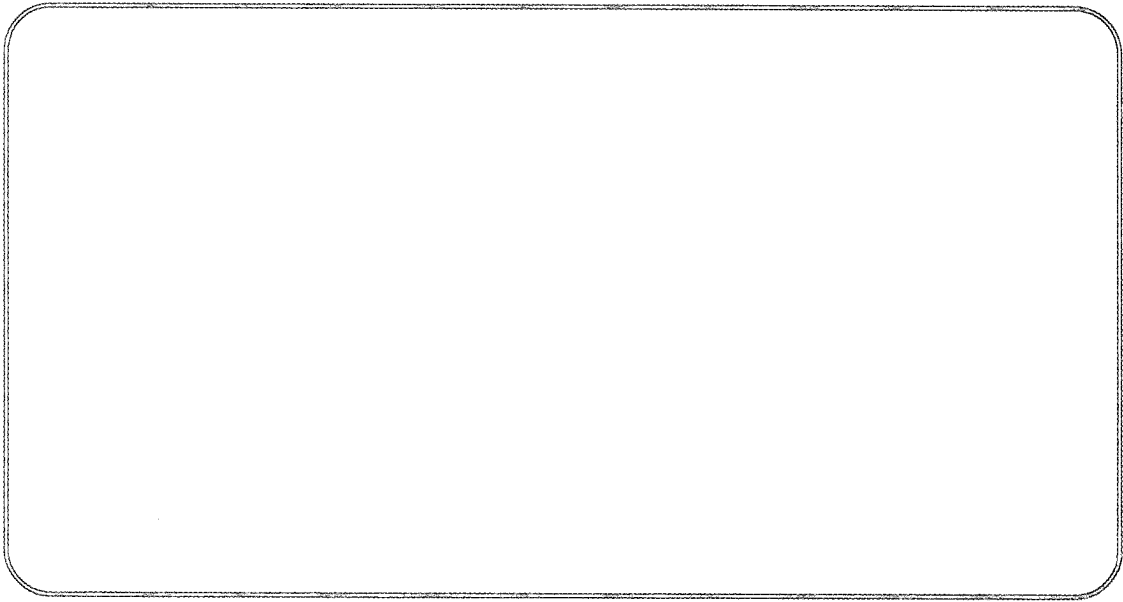








I LOVE MY COUNTRY!

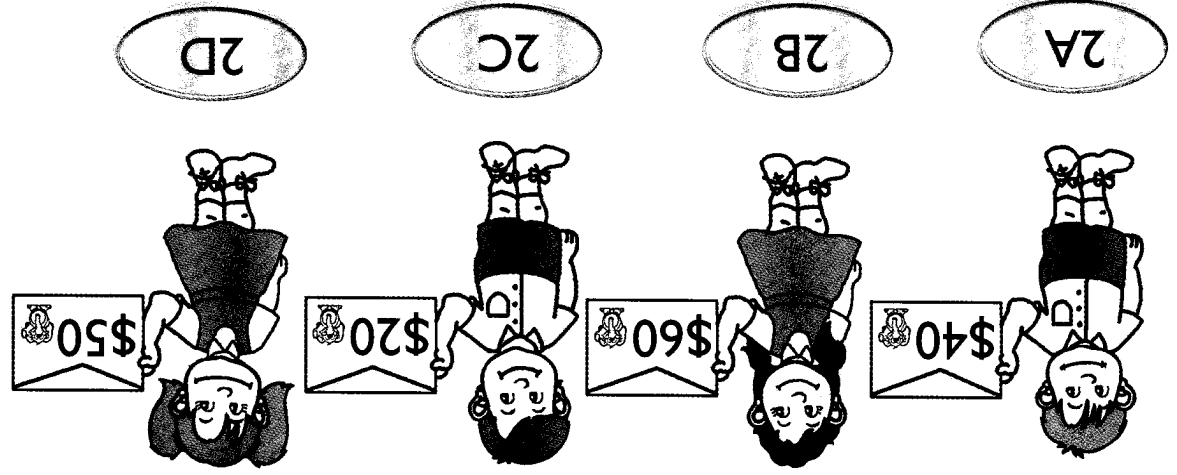
5. Each  stands for 2 U.S. flags. Draw the correct number of  to stand for 10 U.S. flags.



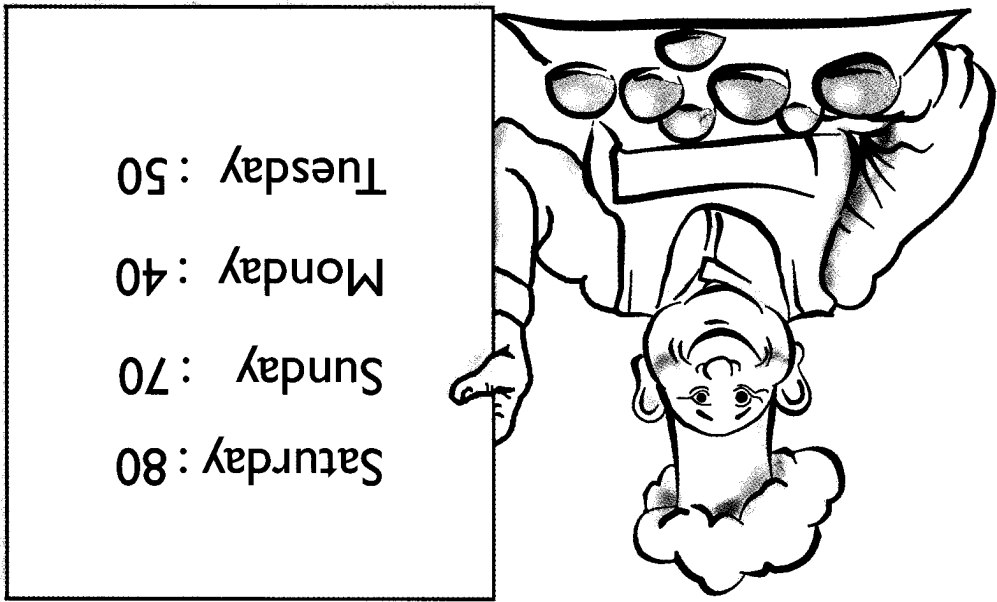
4. Each  stands for 5 balloons. Draw the correct number of  to stand for 30 balloons.

Each [ ] stands for 10 dollars.			
2A	2B	2C	2D

Draw a picture graph to show the amount of money donated by the 4 classes of children for charity. You can draw any picture you like BUT each picture must stand for 10 dollars.



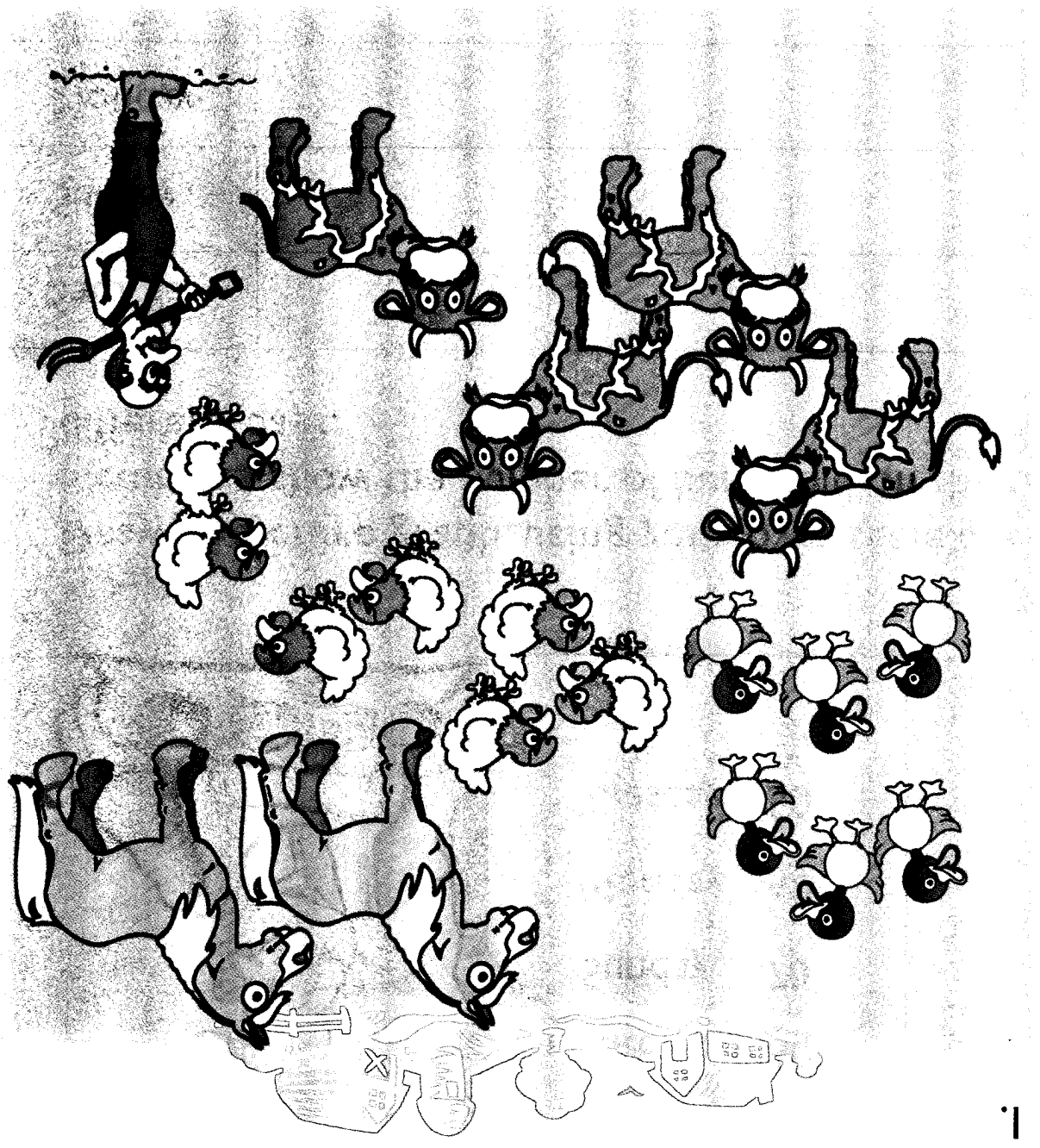
6. These pupils are showing the amount of money collected by each of their classes for charity.



Draw a picture graph, using your own scale and picture, to show the number of buns sold on the 4 different days.

Each [ ] stands for _____ buns.	Tuesday	Monday	Sunday	Saturday

Count the number of different animals in Uncle Smith's farm and complete the picture graph below.



# Exercise Two



1.

Use one [☆] to stand for 1 animal.

Cows	Ducks	Chickens	Horses
☆ ☆ ☆ ☆			

Look at your picture graph and answer the following questions.

(a) Uncle Smith has \_\_\_\_\_ more chickens than ducks.

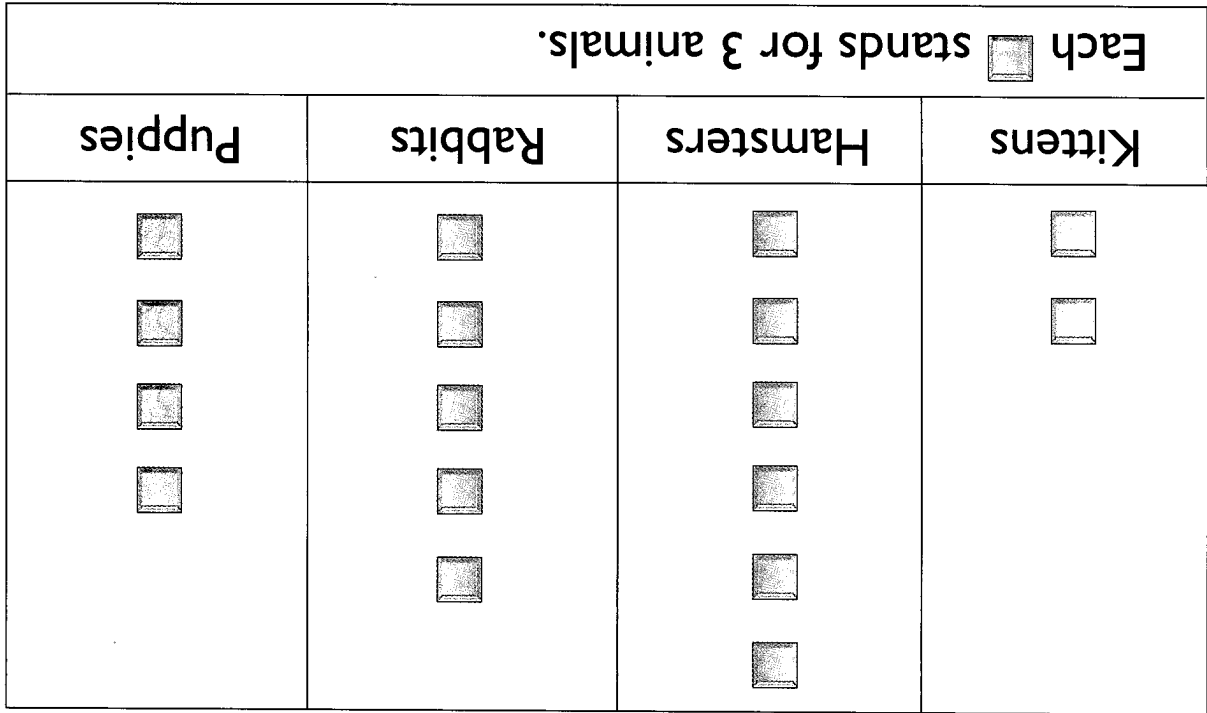
(b) Uncle Smith has the most number of \_\_\_\_\_.

(c) Uncle Smith has the least number of \_\_\_\_\_.

(d) Uncle Smith has \_\_\_\_\_ fewer horses than cows.

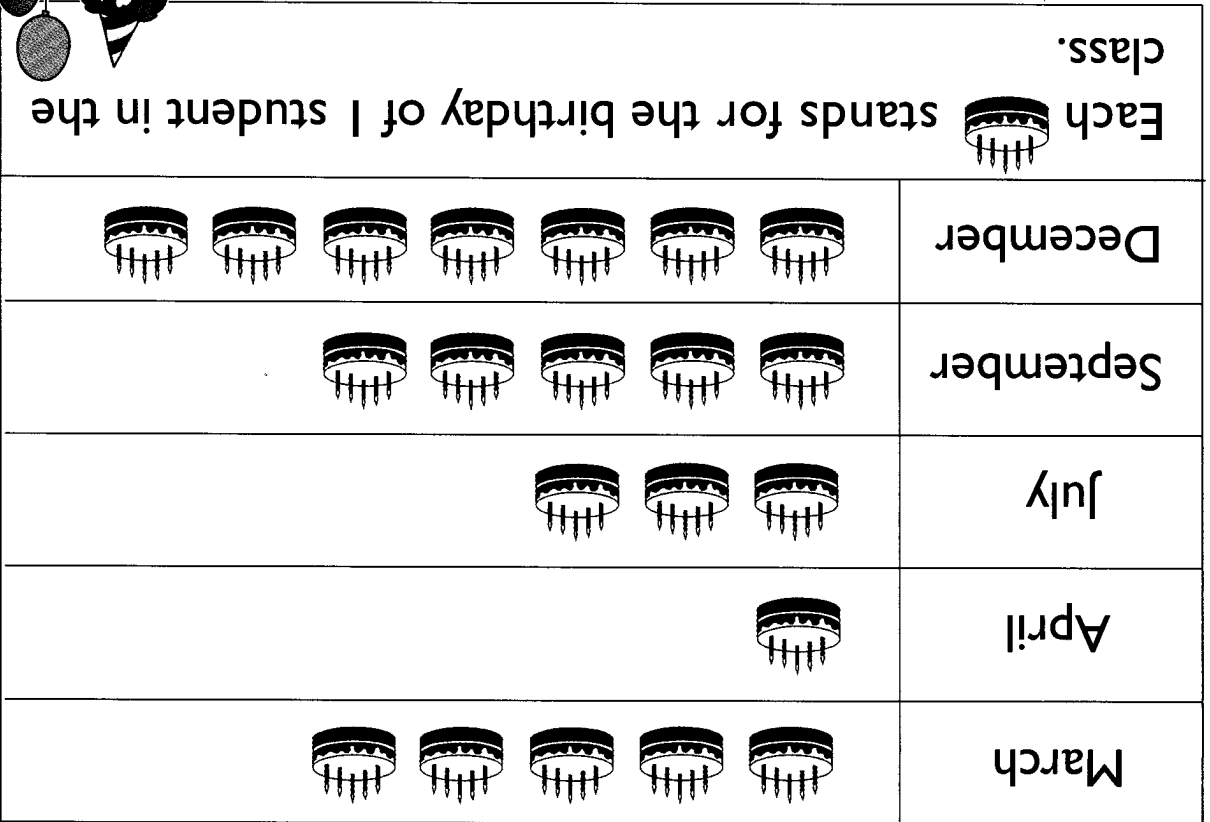
(e) If one duck is missing, Uncle Smith would have \_\_\_\_\_ ducks left.

2. This picture graph shows the number of different kinds of animals in a pet shop.



- Look at the picture graph and answer the following questions.
- (a) How many rabbits are there? \_\_\_\_\_
- (b) How many puppies are there? \_\_\_\_\_
- (c) How many more hamsters than puppies are there? \_\_\_\_\_
- (d) How many kittens than rabbits are there? \_\_\_\_\_
- (e) How many kittens and hamsters are there in the pet shop altogether? \_\_\_\_\_

3. The picture graph shows the number of birthdays in a class in 5 different months.



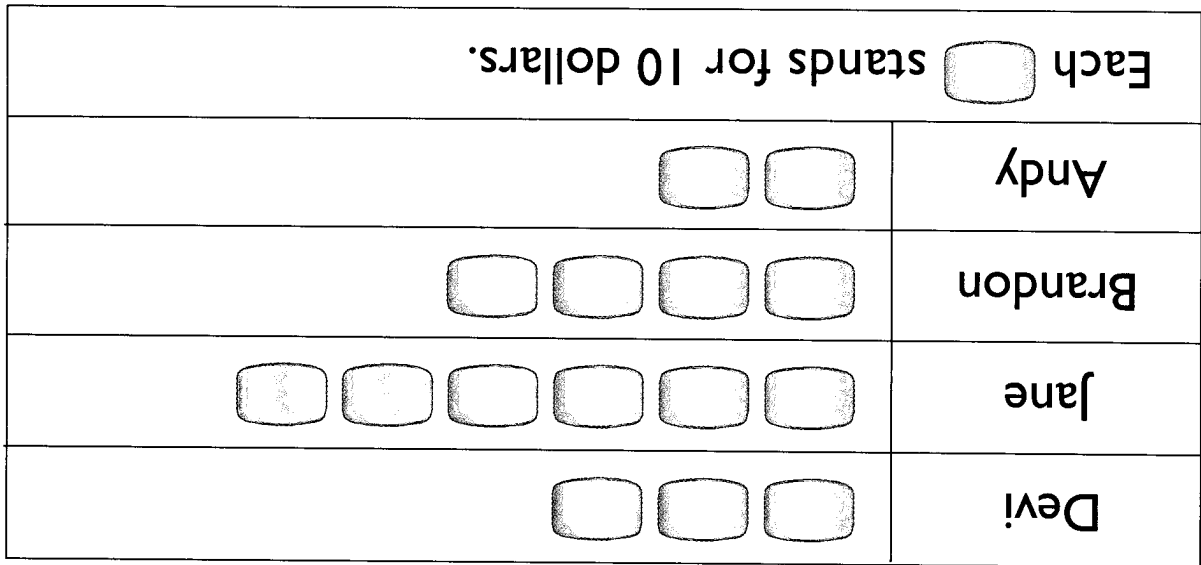
(a) There were most pupils with birthdays in the month of \_\_\_\_\_.

(b) There were same number of birthdays in \_\_\_\_\_ and \_\_\_\_\_.

(c) There are \_\_\_\_\_ more birthdays in December than in April.

(d) There are \_\_\_\_\_ birthdays altogether in the five months shown.

4. This picture graph shows the amount of money saved by four children.



Look at the picture graph and answer the following questions.

(a) Who saved \$10 more than Andy? \_\_\_\_\_

(b) Who saved more than Brandon? How much more? \_\_\_\_\_

(c) Devi bought a story book for \$10, how much savings \_\_\_\_\_

did she have left? \_\_\_\_\_

(d) How much more must Andy have in order to have \_\_\_\_\_

the same amount of money as Jane? \_\_\_\_\_

(e) Brandon's grandpa gives him an additional \$10 on \_\_\_\_\_

his birthday. Show the total amount of money that \_\_\_\_\_

Brandon has now on the graph.



## Exercise Three

1. This picture graph shows the number of children playing different types of games during recess.

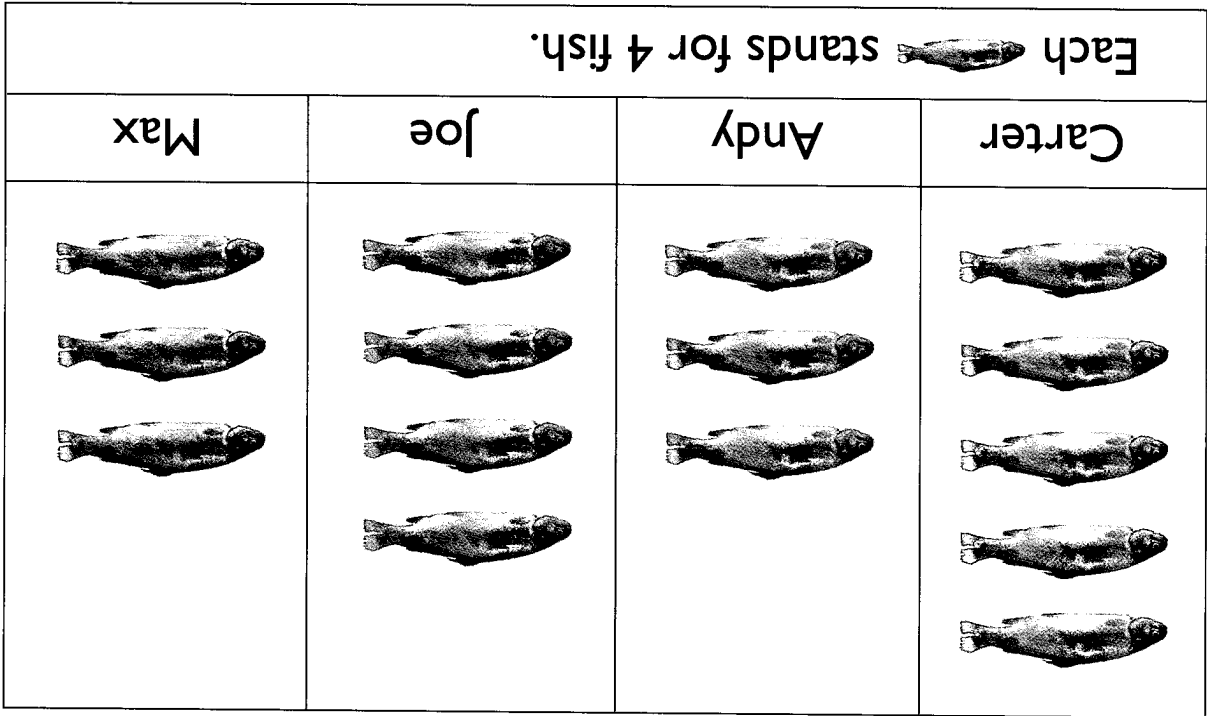
	 Each star stands for 3 children.
Hopscotch	
Scrabble	
Hide-and-seek	
Skipping rope	

Look at the picture graph and answer the following questions.

- (a) Which is the most popular game? \_\_\_\_\_
- (b) Which is the least popular game? \_\_\_\_\_
- (c) How many children are playing scrabble? \_\_\_\_\_
- (d) If 2 boys playing hide-and-seek decided to take a rest, how many children are left playing hide-and-seek? \_\_\_\_\_

(e) 15 girls are playing hopscotch and 4 girls join in. How many children are playing hopscotch now? \_\_\_\_\_

















2. This picture graph shows the number of fish caught by 4 boys during one weekend.



Look at the picture graph and answer the following questions.

- (a) \_\_\_\_\_ caught the most number of fish.
- (b) Joe caught \_\_\_\_\_ more fish than Max.
- (c) Max caught \_\_\_\_\_ fewer fish than Carter.
- (d) Andy put all his fish into a fish tank, there were \_\_\_\_\_ fish in the fish tank.
- (e) Max had 12 fish. Then Carter gave him 10 more. Max had \_\_\_\_\_ fish in all.

3. This picture graph shows the number of paper-flowers made by 4 girls.

Each  stands for 2 paper flowers.				
Tina				
Joyce				
Karima				
Cheryl				

Look at the picture graph and answer the following questions.

(a) How many paper-flowers did Cheryl make?

(b) Who made two times as many paper-flowers as

Joyce? \_\_\_\_\_

(c) How many paper-flowers did Joyce and Tina have

altogether? \_\_\_\_\_

(d) Cheryl had 12 paper-flowers and wanted to put

3 each into one vase. How many vases did she

need? \_\_\_\_\_

(e) If Karima used 1 sheet of paper to make 2 paper-

flowers, how many sheets of paper did she use

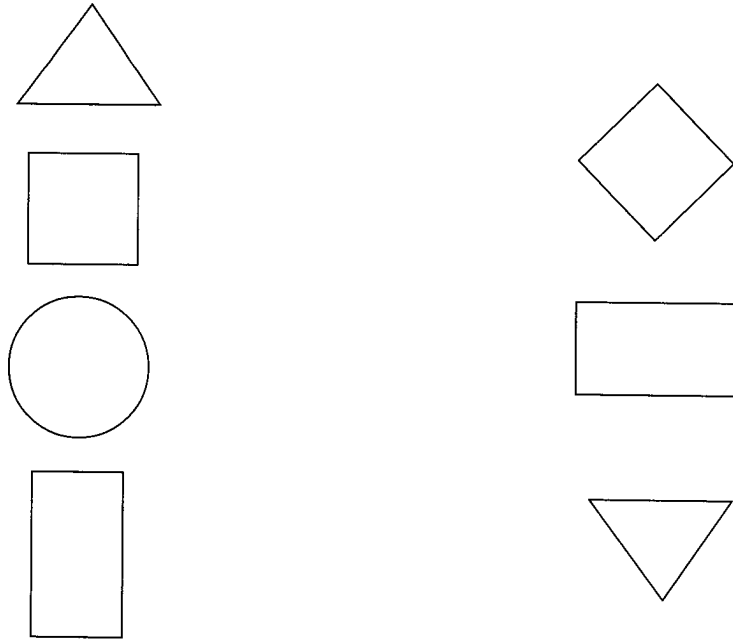
altogether? \_\_\_\_\_

# Shapes And Patterns

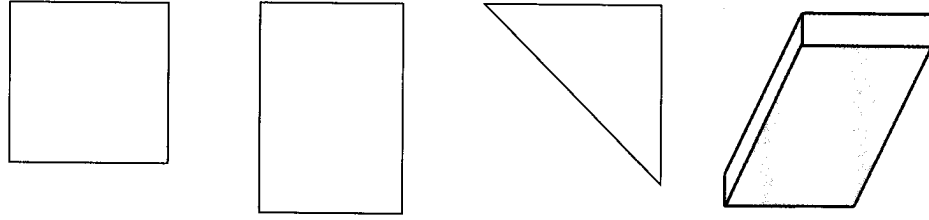
## Exercise one



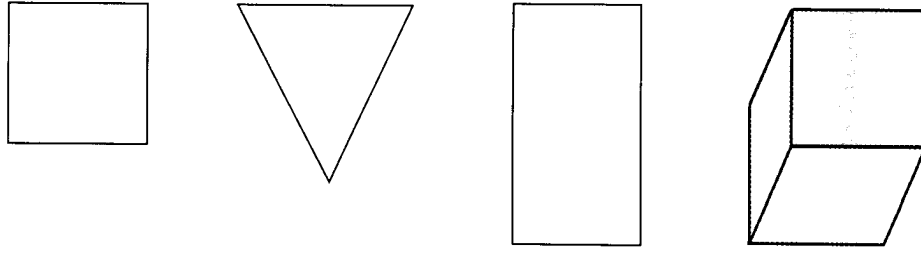
1. Join the objects which have the same shape.



2. Color the shape that is the same as the shaded part.

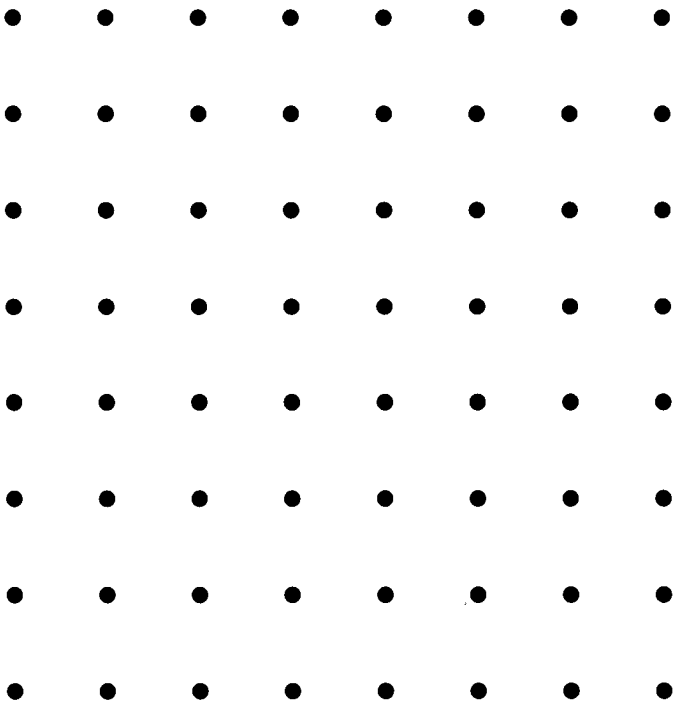


(a)



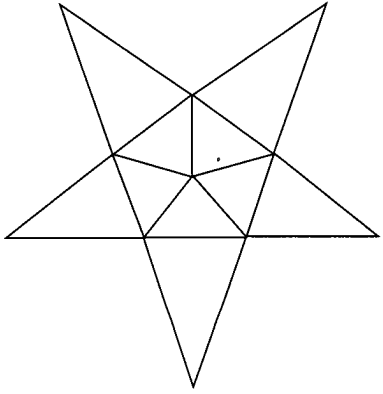
(b)

3. Join the dots to draw as many different-sized squares as you can. Do not overlap squares.

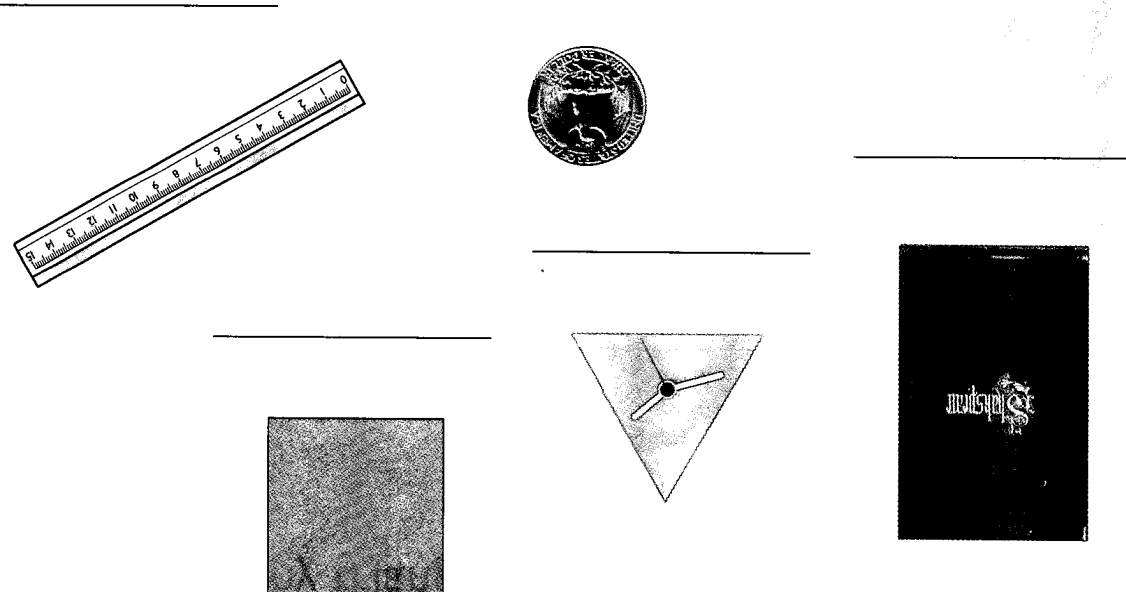


I can draw \_\_\_\_\_ squares.

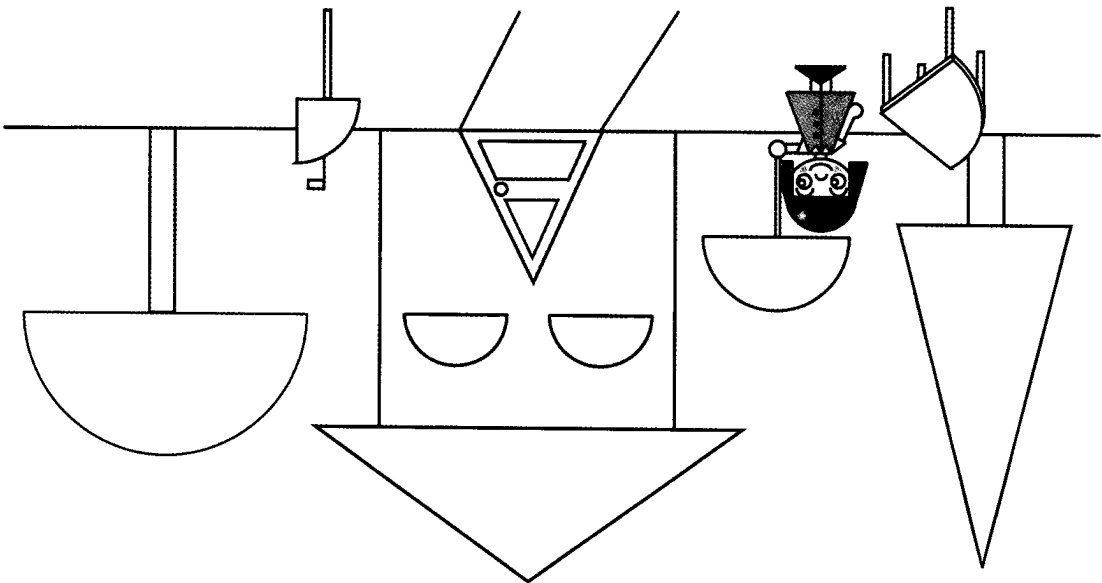
4. How many triangles are there in the figure?



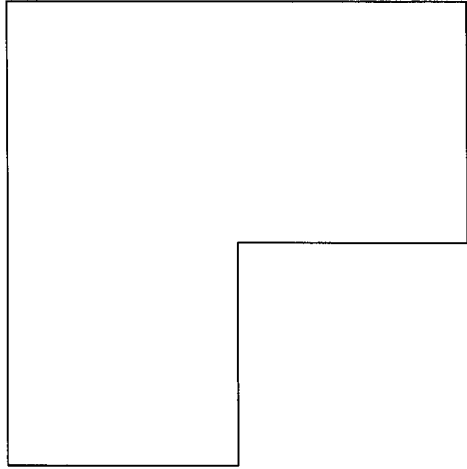
There are \_\_\_\_\_ triangles.



2. Trace the outline of each object. Write the name of the shape of the outline.

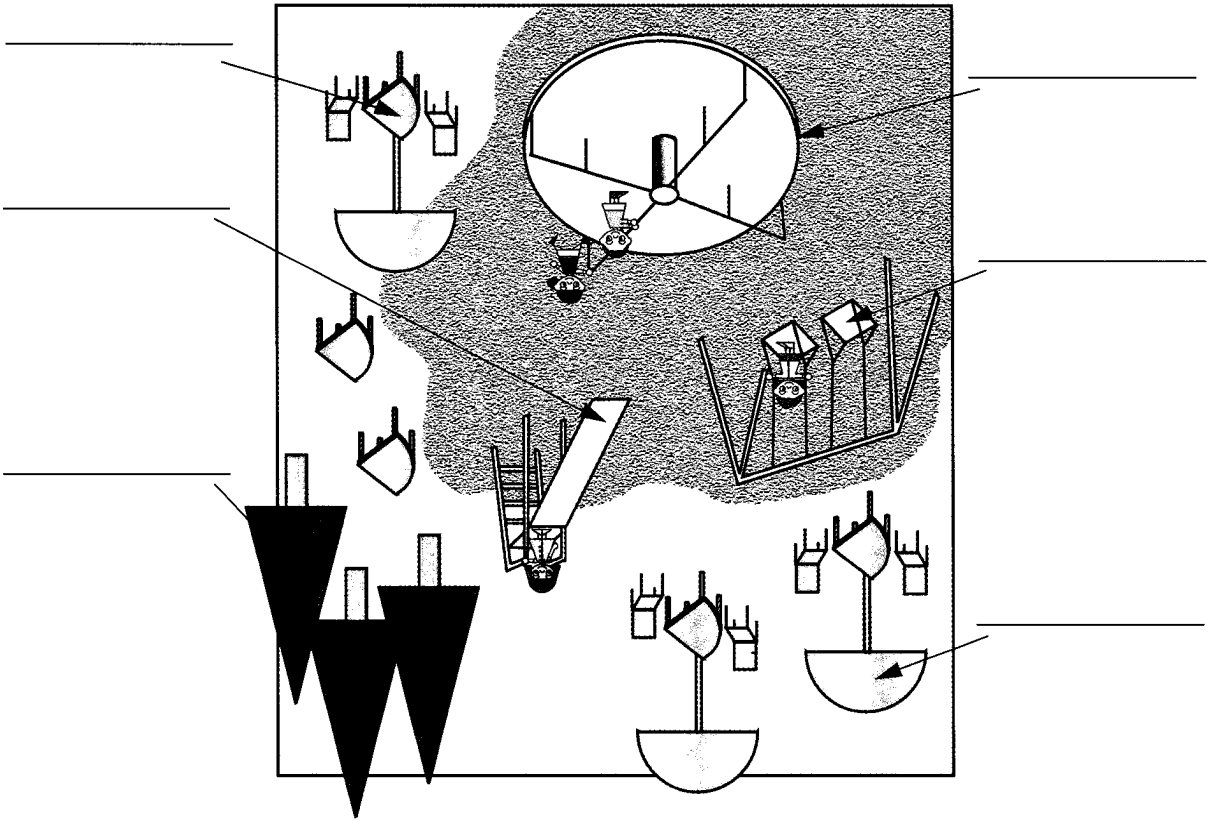


1. Color all the semi-circles yellow and quarter circles green in the picture.

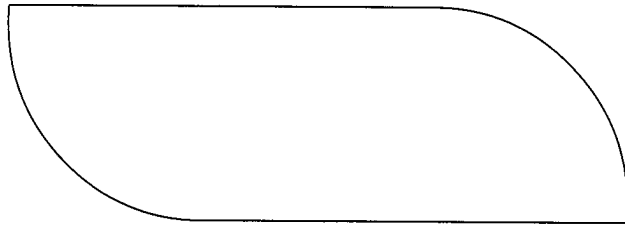


• 3 squares

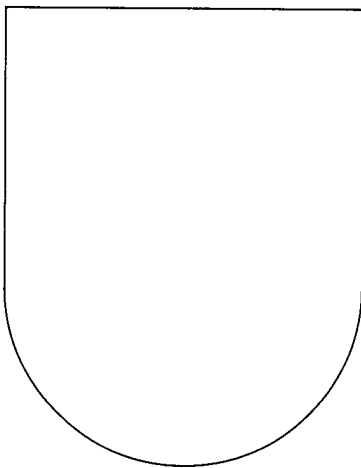
4. Draw dotted lines on each figure to show how it is formed by the following shapes:



3. Name the following shapes.



• 2 quarter circles and 1 rectangle

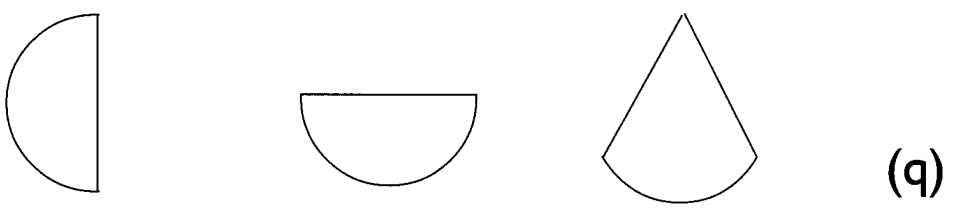
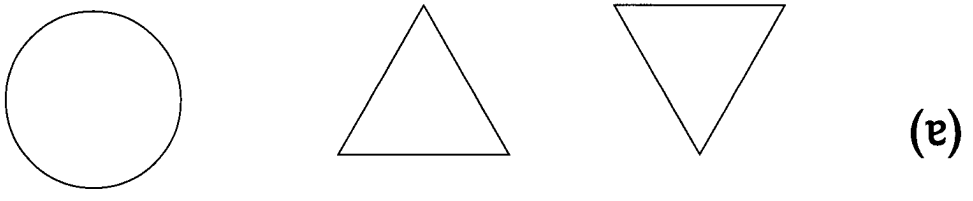


• 1 semi-circle and a rectangle

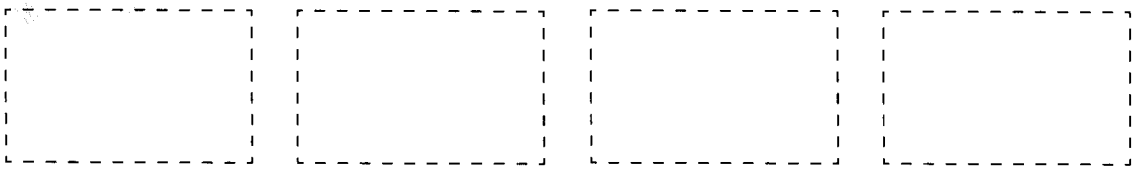
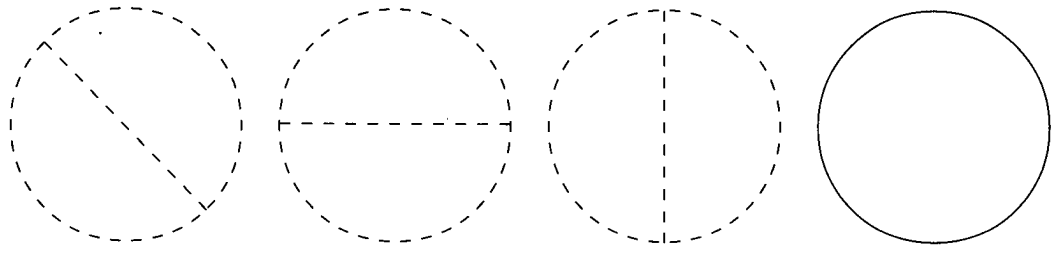
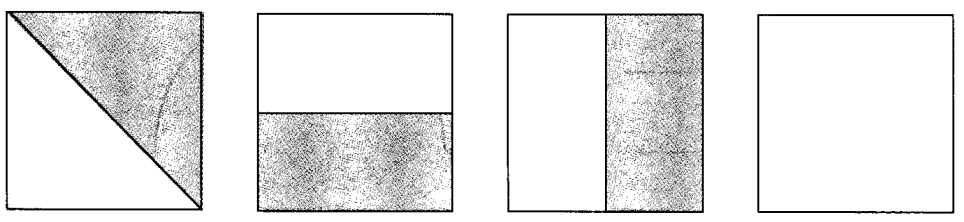


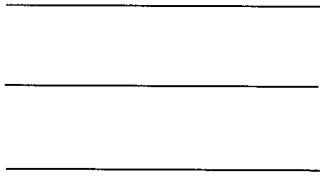
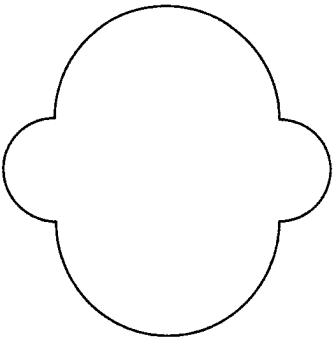
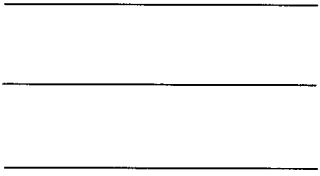
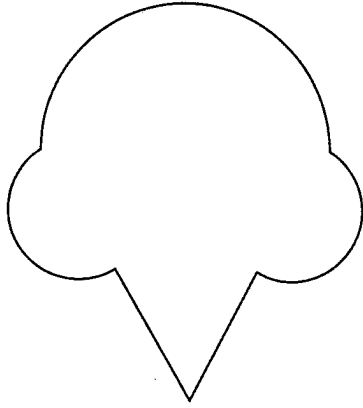
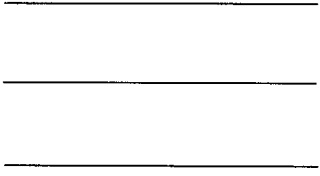
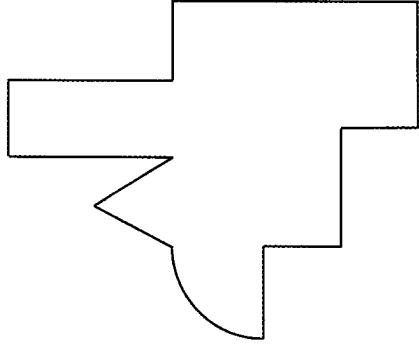
**Exercise three** 

1. Circle the shape that does not belong to the set.

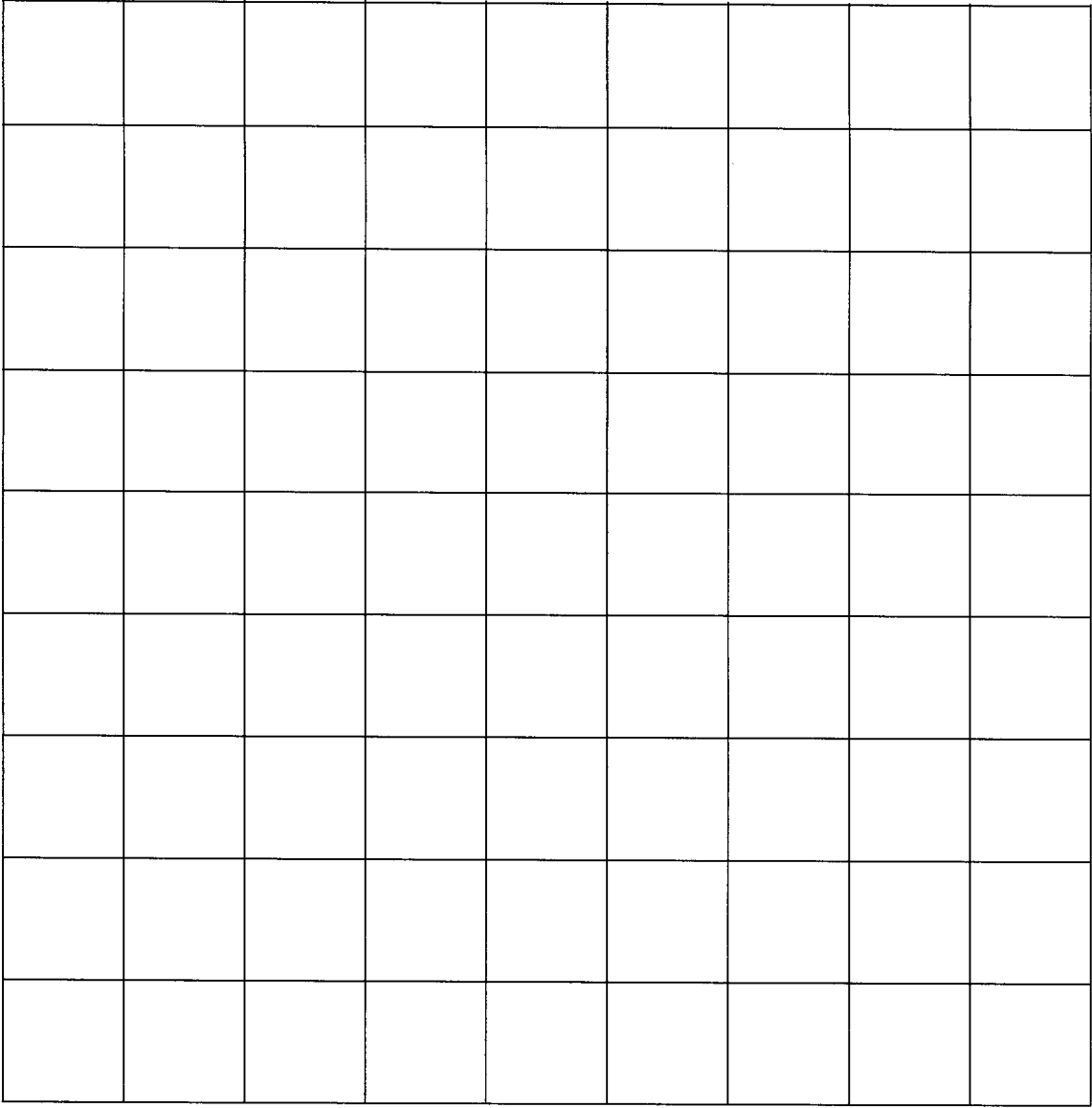


2. Look at the first pattern. Then draw to complete the following patterns in the same way.





3. Draw dotted lines to show the different shapes that make up the figure. Color each shape using a different color. Then write the number and name of each kind of shape.



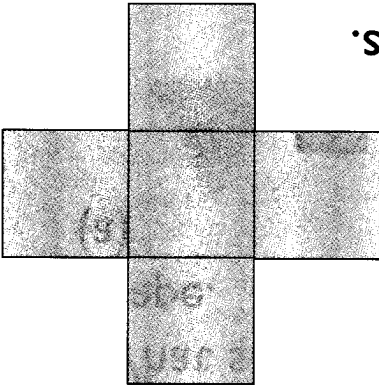
Each one must be different.

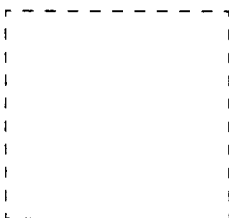
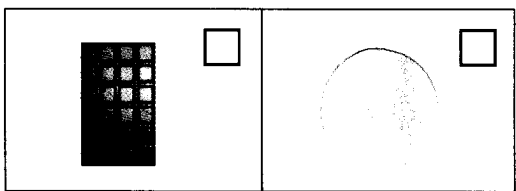
4 shapes, each made up of 5 squares.

In the grid below, color another

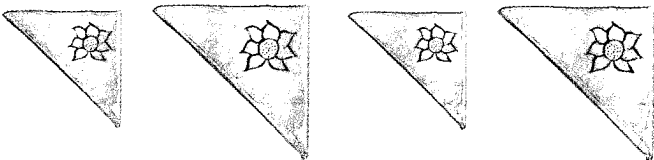
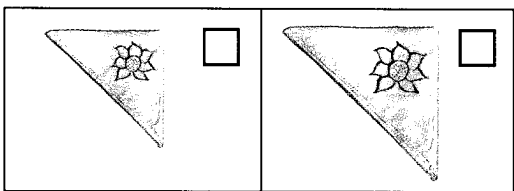
It is made up of 5 squares.

4. Look at this shape.

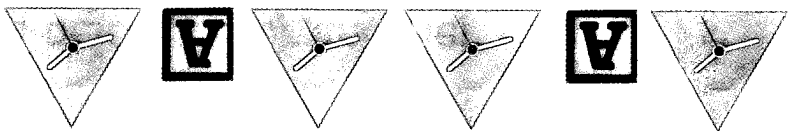
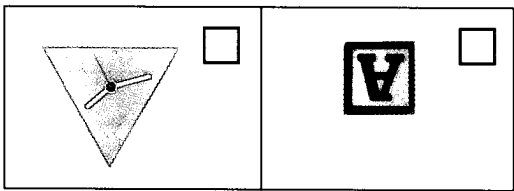




(c)

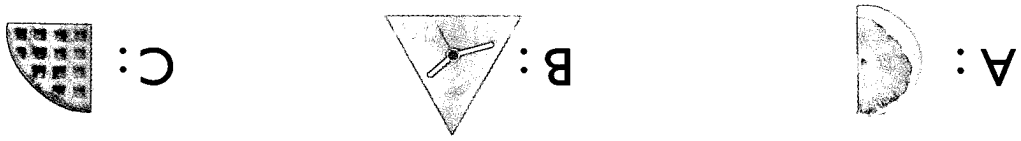
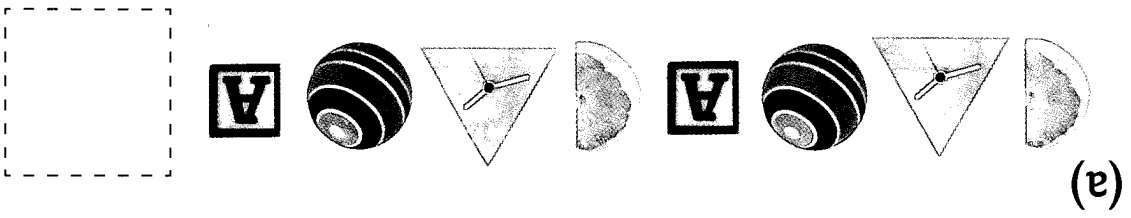
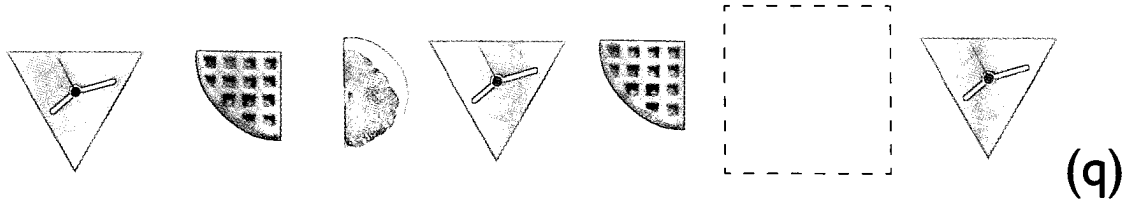


(b)

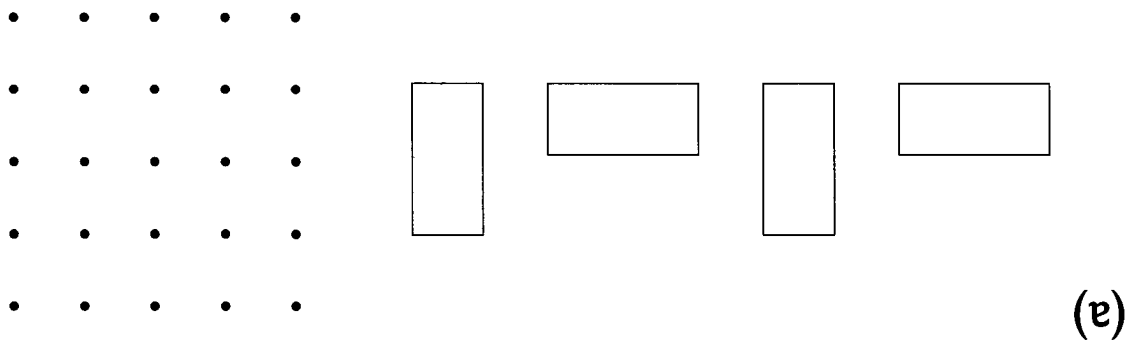
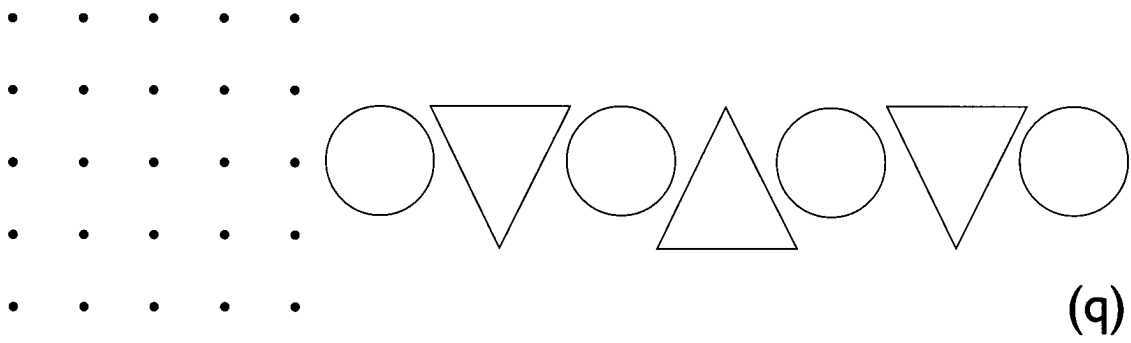


(a)

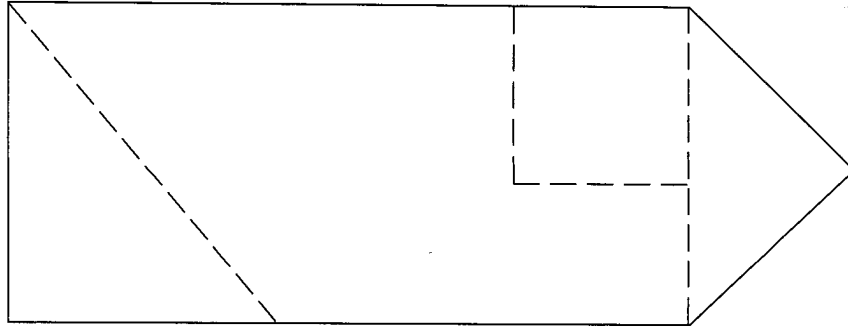
5. What shape comes next? Put a tick at the correct shape.



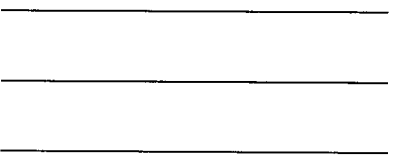
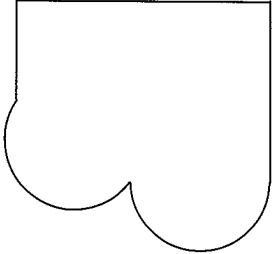
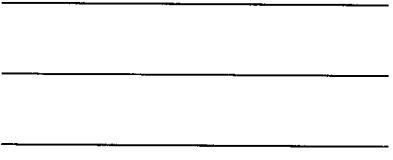
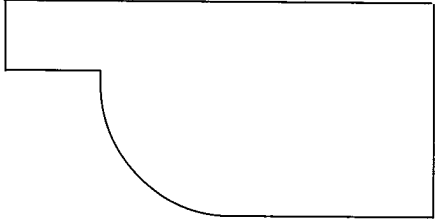
7. Match the following by writing the correct letter in the box.



6. Draw the shape that comes next in the dotted-grids.



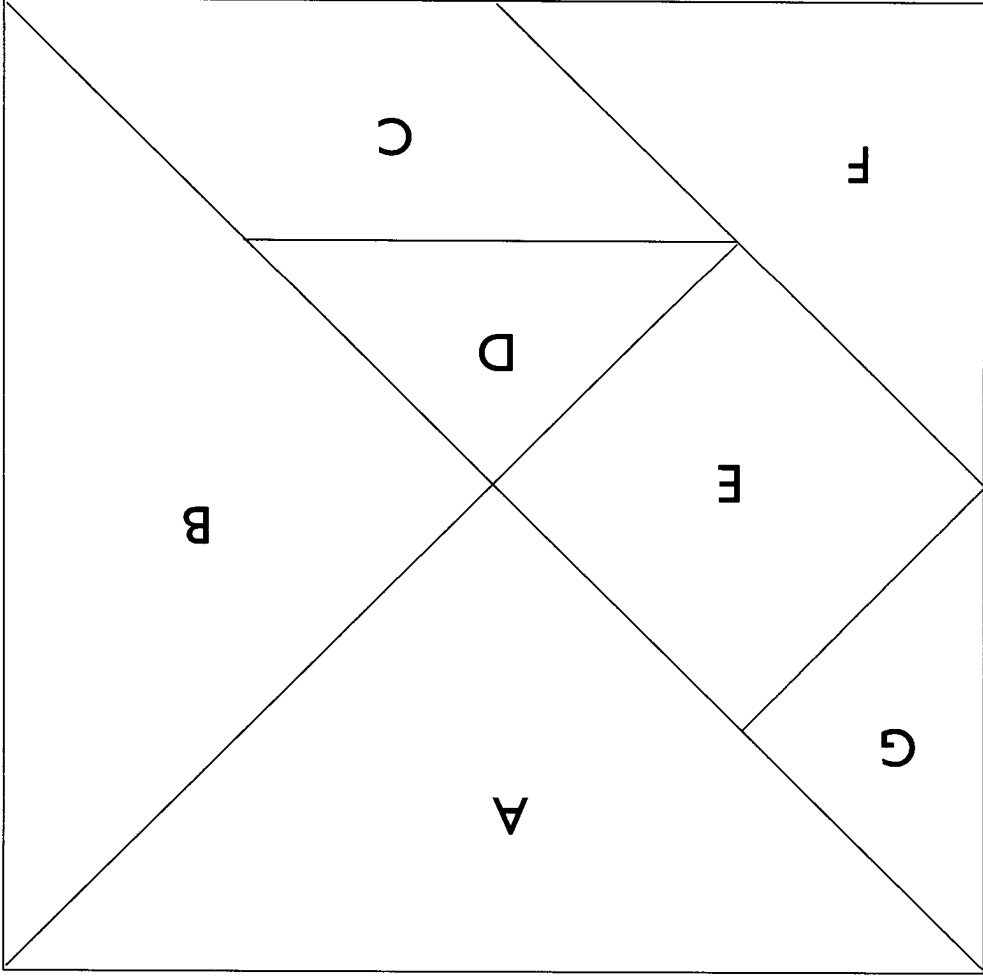
9. Look at this figure.  
 It is made up of 3 squares and 6 triangles.  
 1 square and 2 triangles are shown.  
 Use dotted lines to show where  
 the other shapes are.

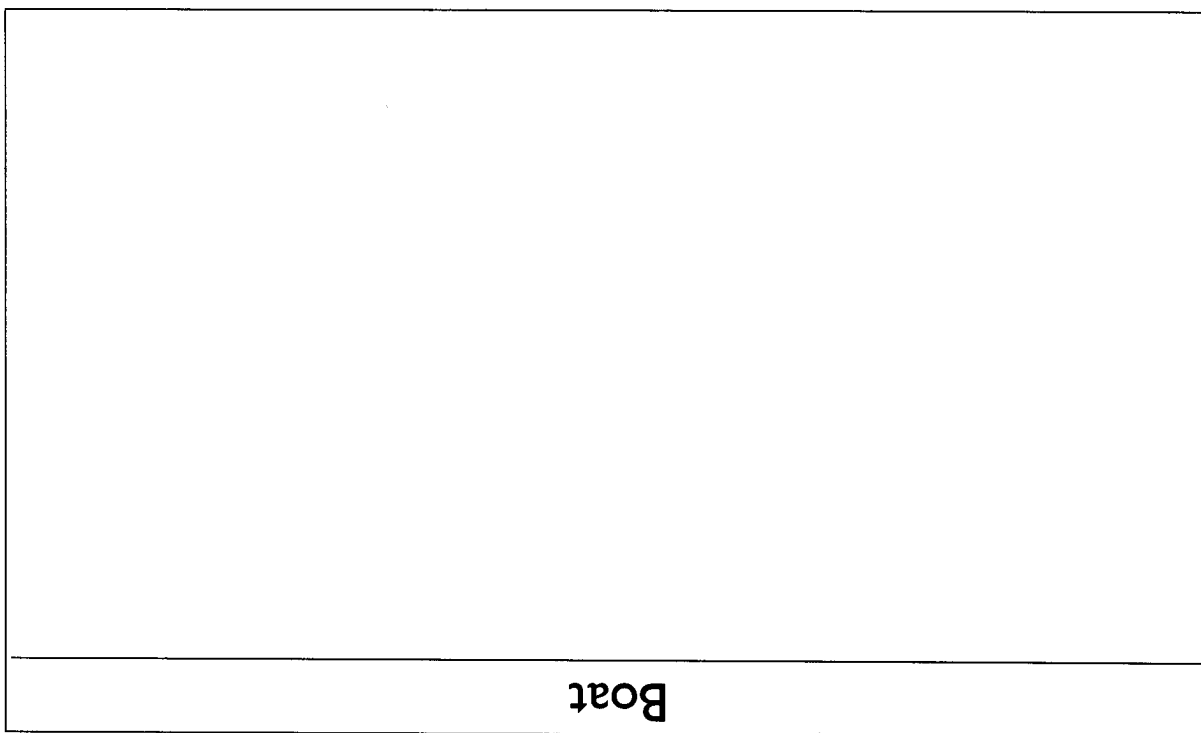
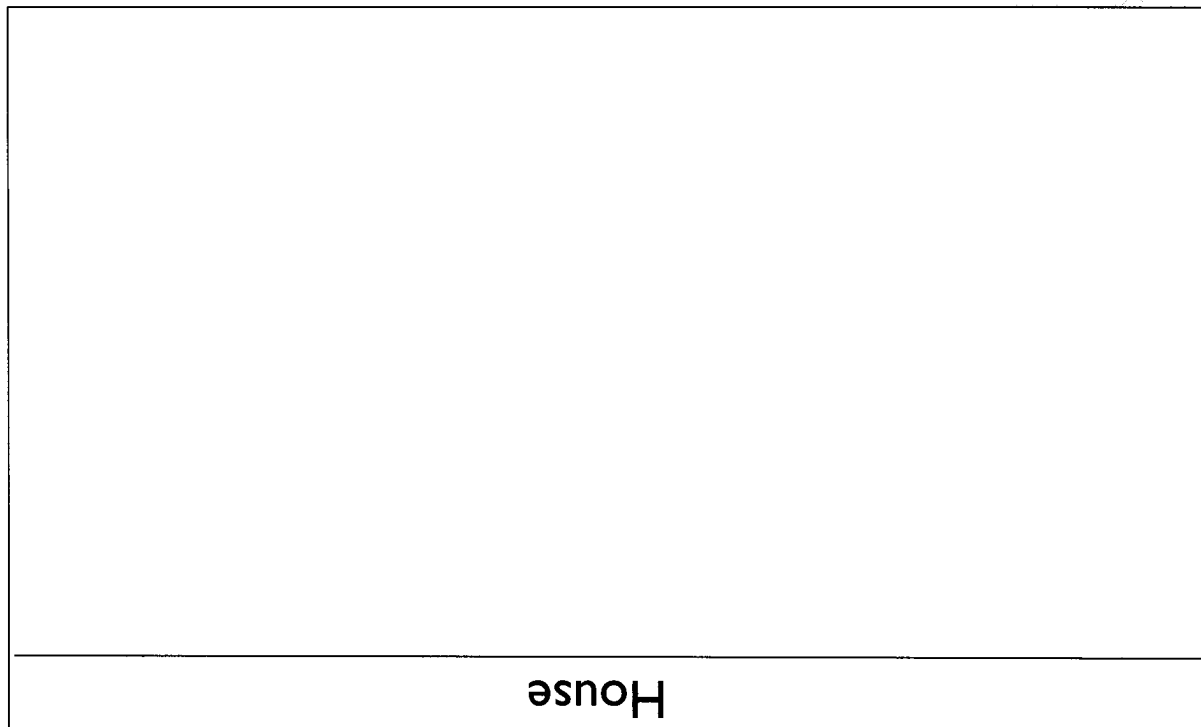
	
	
Shapes	Figure

8. Draw dotted lines to cut the following figures into basic shapes. Write the names of the basic shapes.

Look at this tangram. Use the tangram given and label it as shown. Use the shapes of a tangram to make a

- boat
- house





Draw the outline of the figures you have made and color them:



# Lines, Curves and Surfaces

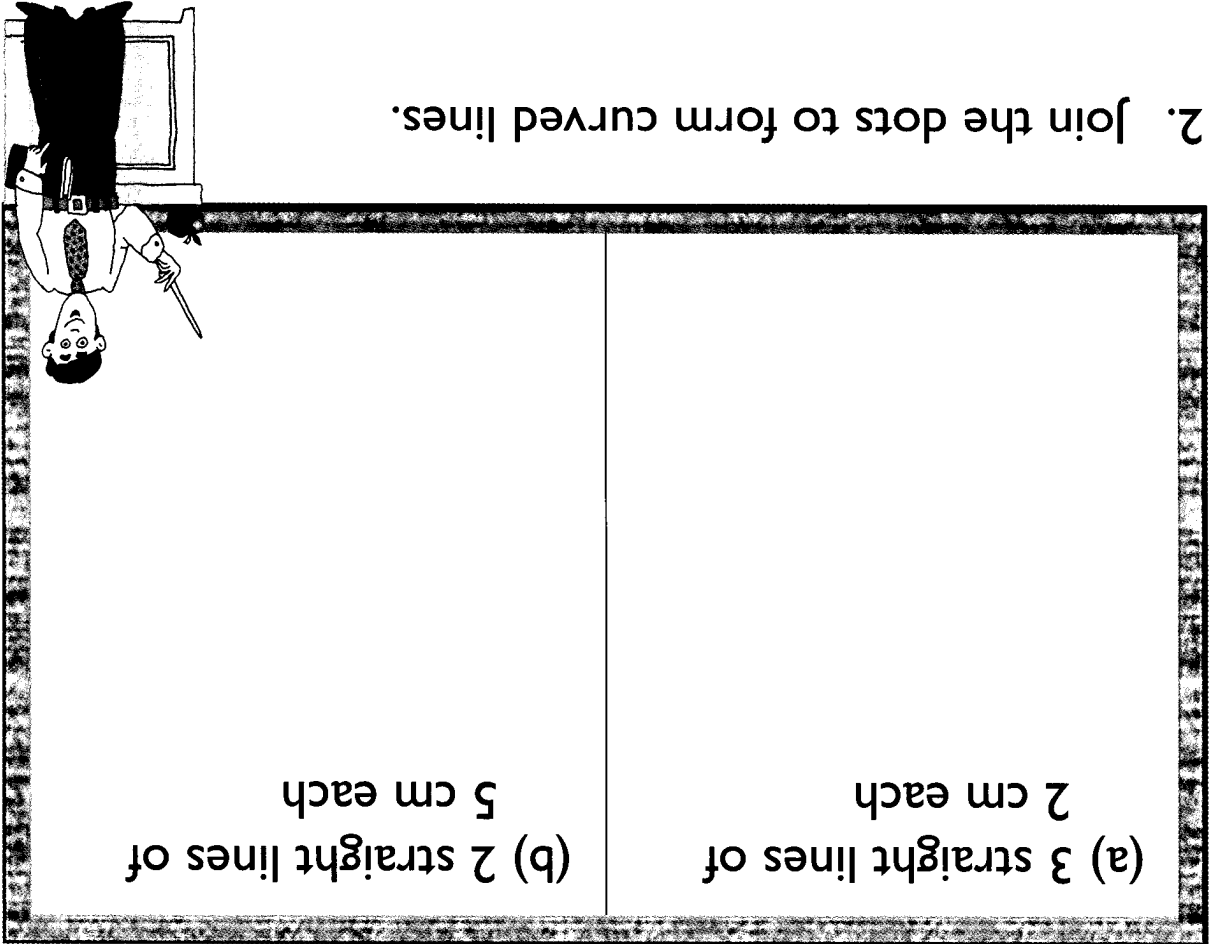
## Exercise one



1. Use a ruler to draw the lines with the following lengths:

(a) 3 straight lines of 2 cm each

(b) 2 straight lines of 5 cm each



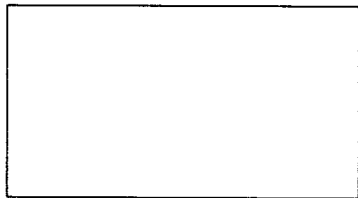
2. Join the dots to form curved lines.



3. In the boxes below, write 3 capital letters which have only straight lines, and 3 capital letters which have curved lines. Examples are shown for you.

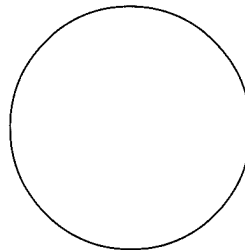
Letters with straight lines	H			
Letters with curved lines	P			

4. Write the number of straight lines and curved lines that make up the following shapes.



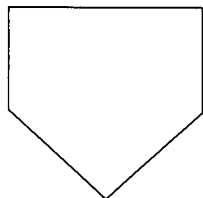
straight line(s)

curved line(s)



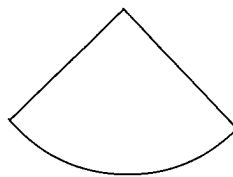
straight line(s)

curved line(s)



straight line(s)

curved line(s)

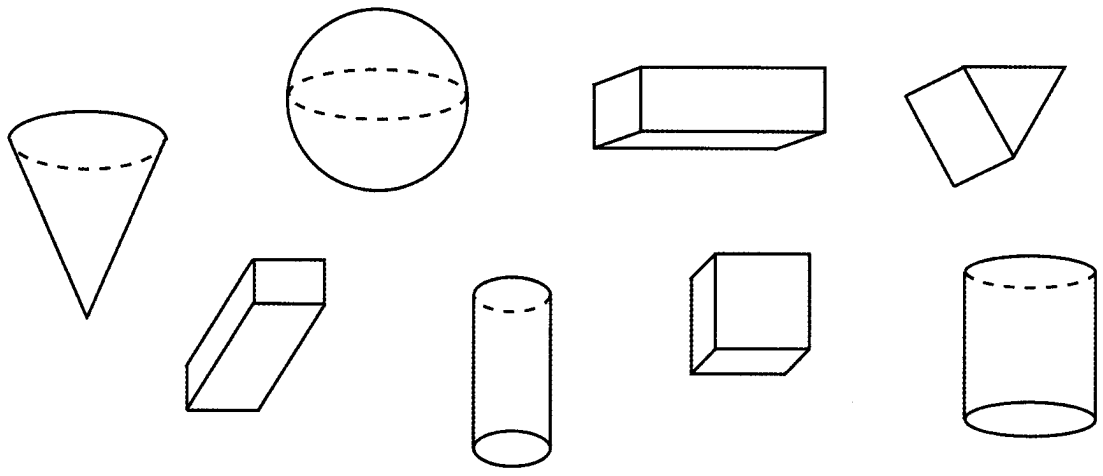


straight line(s)

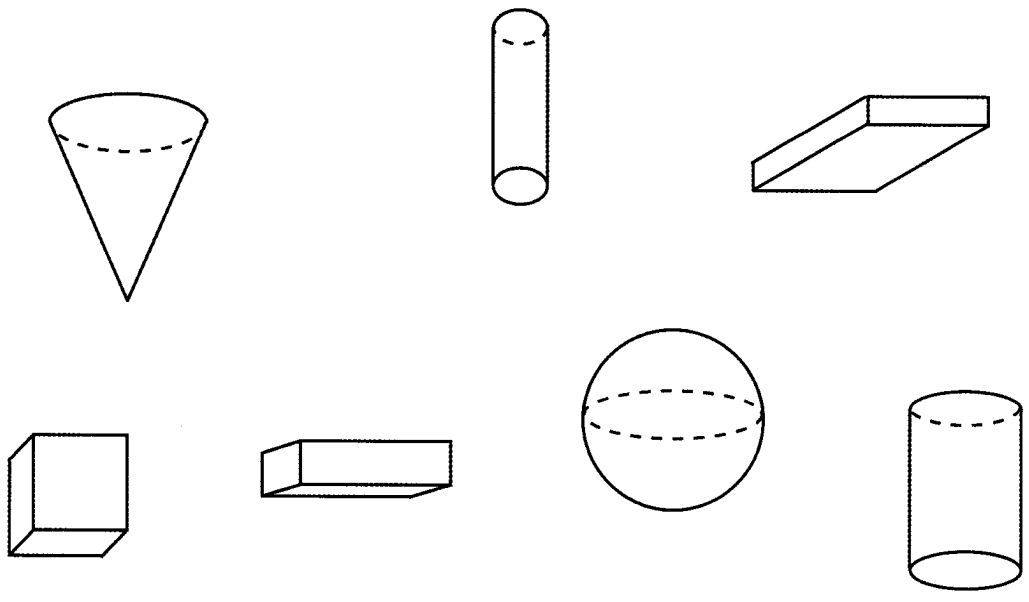
curved line(s)

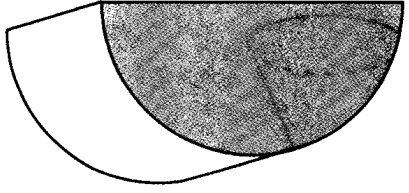
**Exercise two** 

1. Circle all the objects that have curved surfaces.

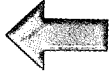
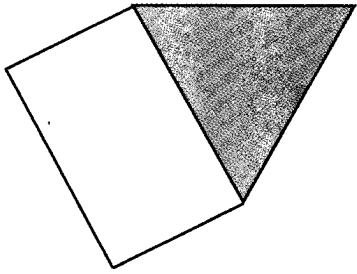


2. Circle the objects that have only flat faces.

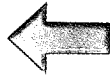
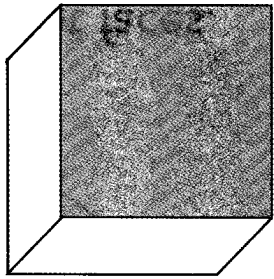




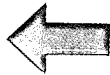
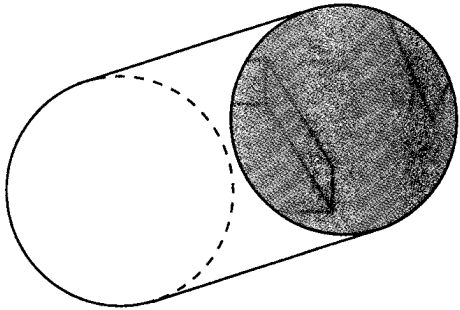
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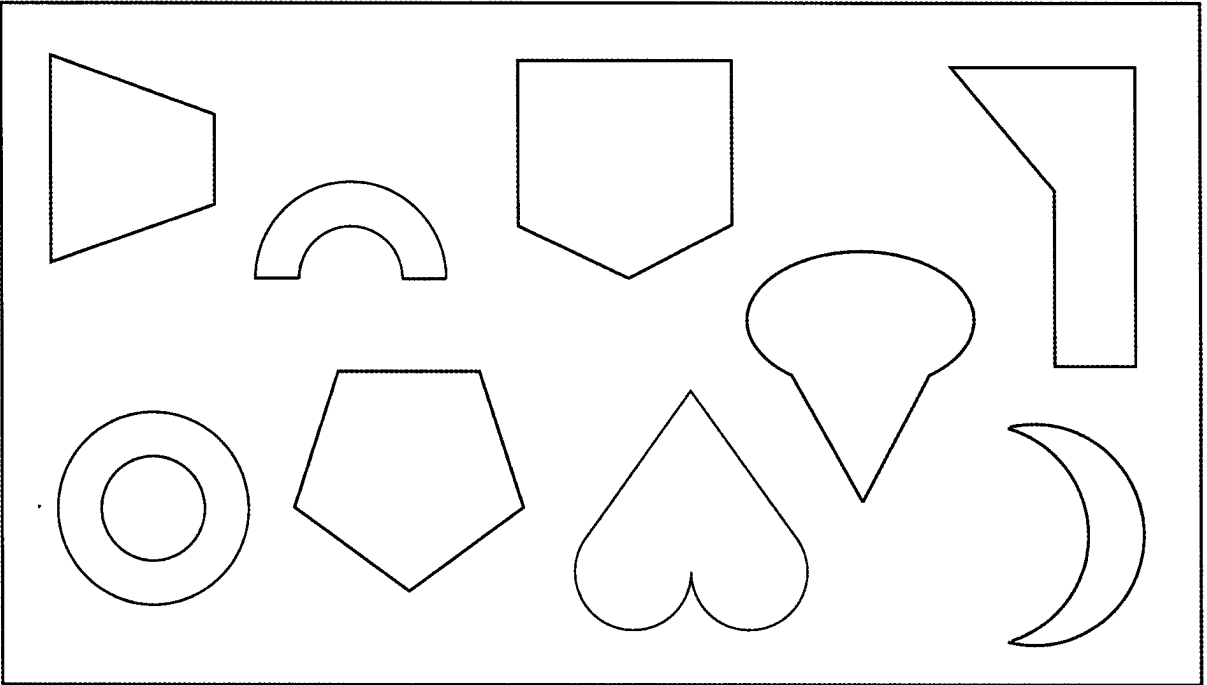
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3. Identify the shape of each shaded face.

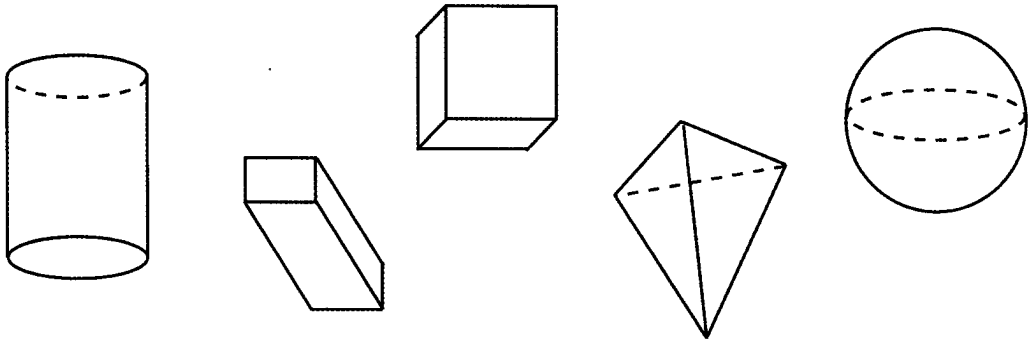
# Exercise three

1. Color the shapes with the following:

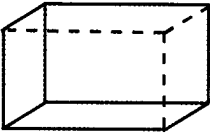
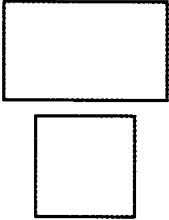
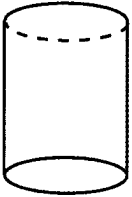
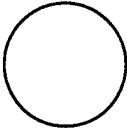
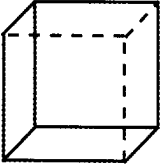
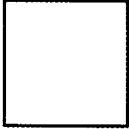
Only straight lines : YELLOW  
curved lines : BLUE



2. Circle the objects with only curved surfaces.



3. Complete the table by naming and writing the number of flat faces on each solid.

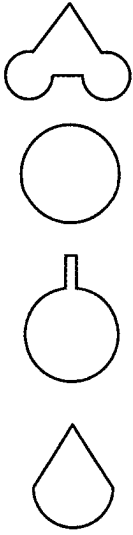
Solid	Flat Faces	Name	Number
		_____	_____ _____
		_____	_____
		_____	_____

4. Match.

2 curved lines & 3 straight lines

1 curved lines & 2 straight lines

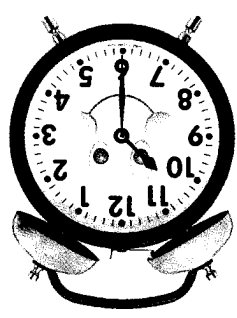
3 straight lines & 1 curved lines



# Let's Revise

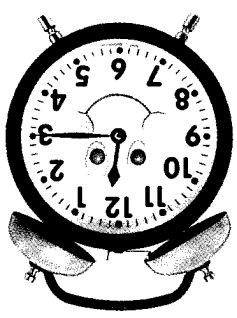
## Exercise one

1. Fill in the blanks.



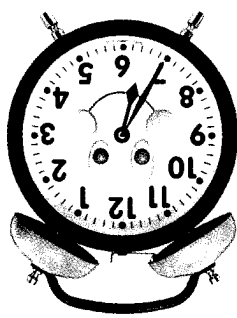
(a)

The time is \_\_\_\_\_ p.m.



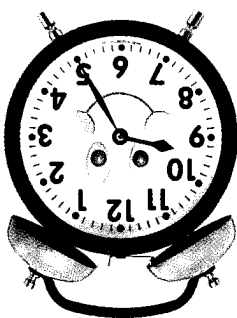
(b)

The time is \_\_\_\_\_ p.m.



(c)

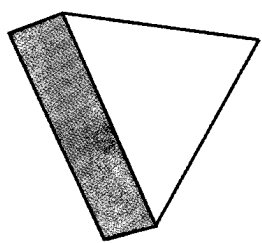
The time is \_\_\_\_\_ a.m.



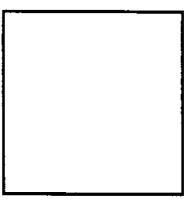
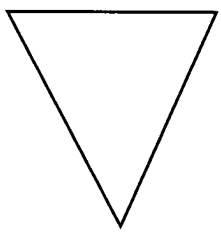
(d)

The time is \_\_\_\_\_ a.m.

2. Color the shape that is the same as the shaded part.



(a)



(b)

8

curved line(s)

straight line(s)

(a)

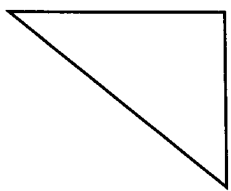
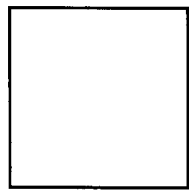
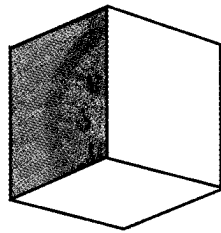
2

curved line(s)

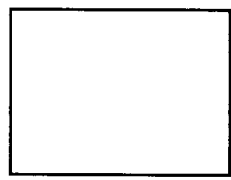
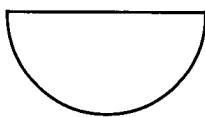
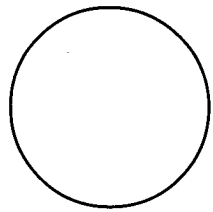
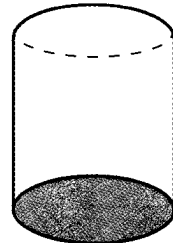
straight line(s)

3. Write the number of straight lines and curved lines that the following numbers have.

(c)

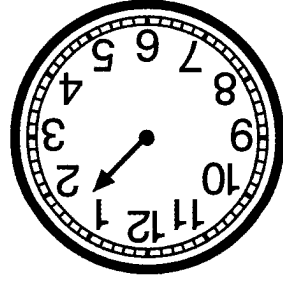


(b)



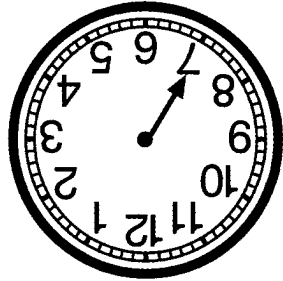


Half an hour after  
1 o'clock in the  
afternoon.



(b)

7 o'clock in the  
morning.



(a)

write the time.

4. Draw the minute hand to show the time given. Then

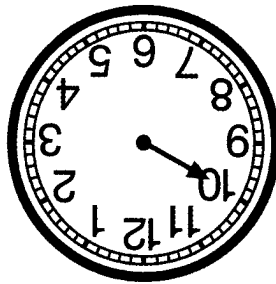
curved line(s)

straight line(s)



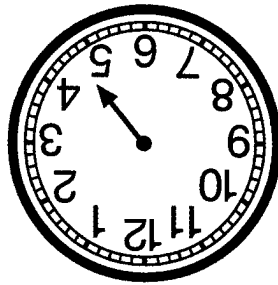
(c)

10 o'clock  
in the morning



(p)

Half an hour  
before 5 o'clock  
in the evening

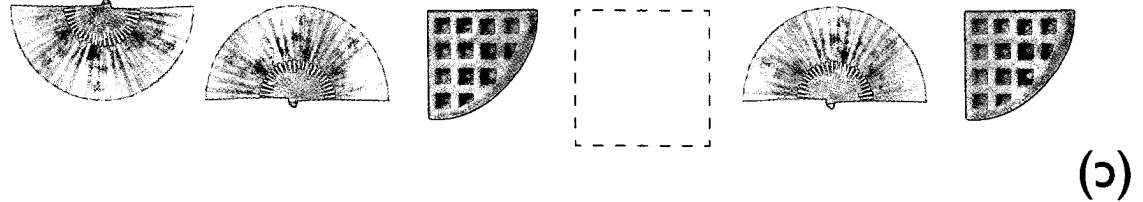
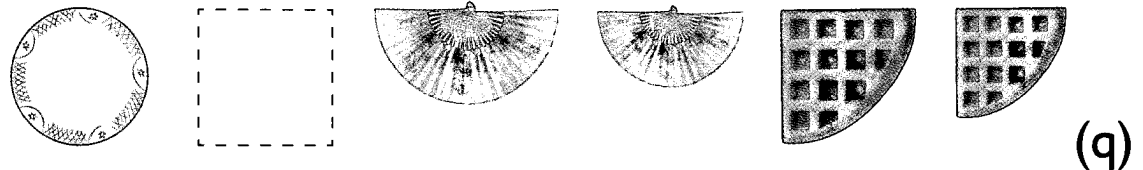
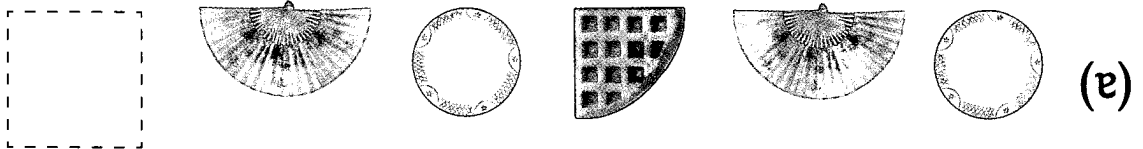
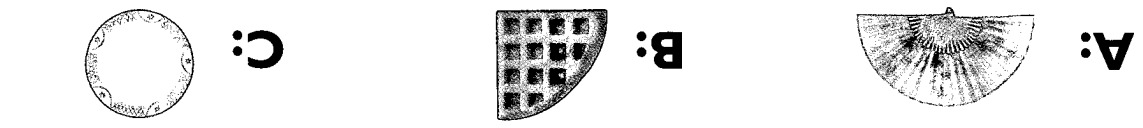


(c)

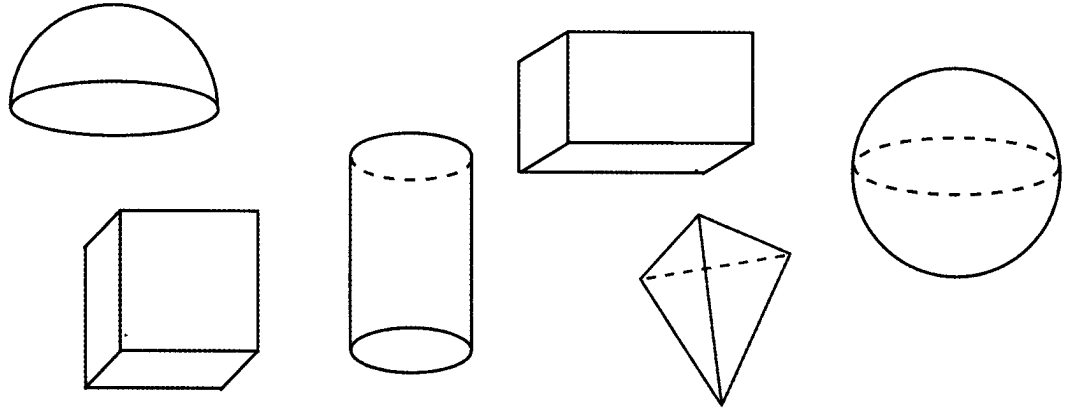
# Exercise Two



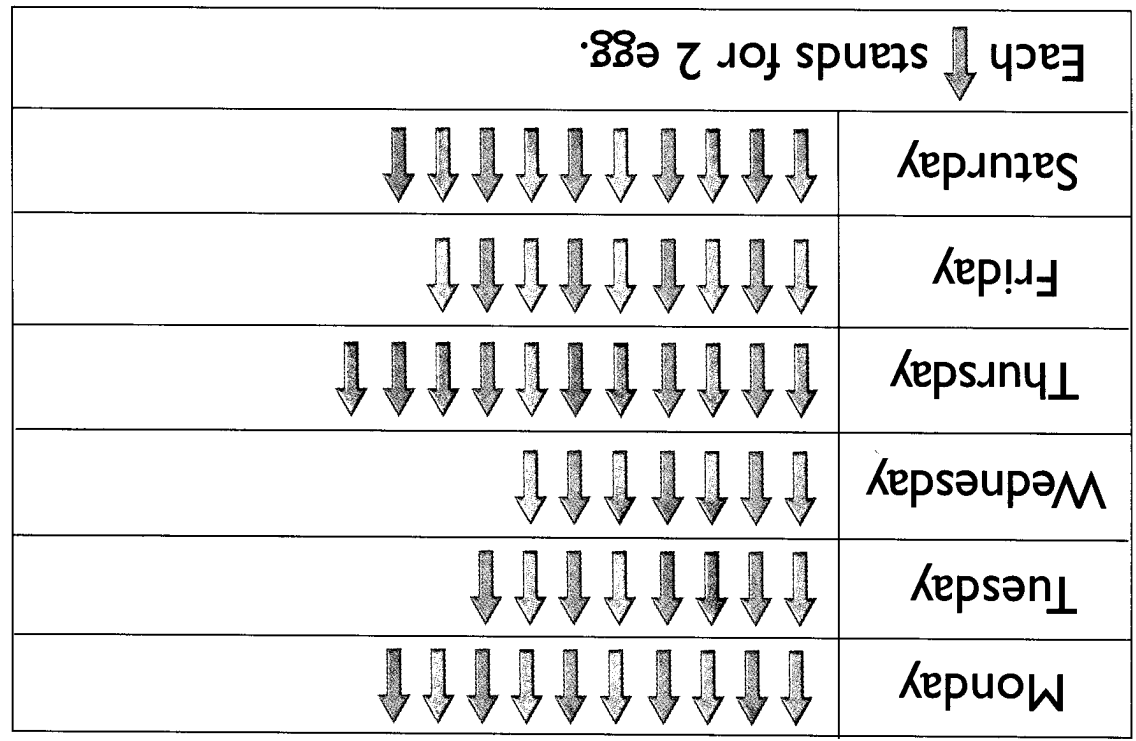
1. Match the following by writing the correct letter in the dotted box.



2. Cross out the objects with curved surfaces.

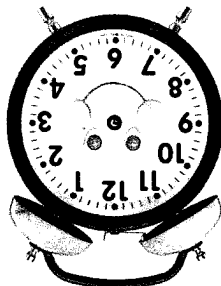


- (a) Mrs. Donald collected \_\_\_\_\_ eggs on Friday.
- (b) Mrs. Donald collected \_\_\_\_\_ eggs on Tuesday.
- (c) She collected \_\_\_\_\_ more eggs on Thursday than on Wednesday.
- (d) She collected as many eggs on Monday as she did on \_\_\_\_\_.

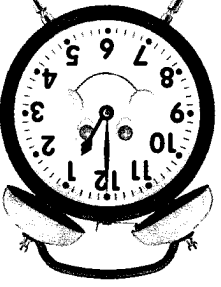


3. The graph shows the number of eggs collected by Mrs. Donald.

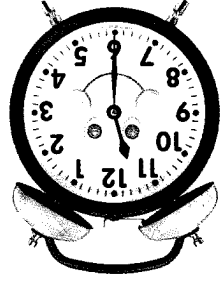
\_\_\_\_\_

(p)  \_\_\_\_\_

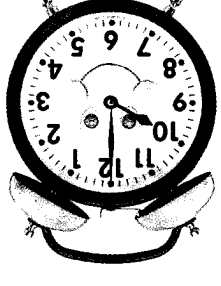
1.00

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

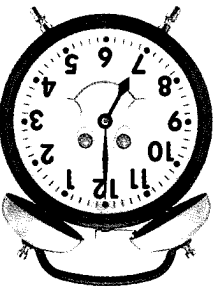
\_\_\_\_\_

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

\_\_\_\_\_

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

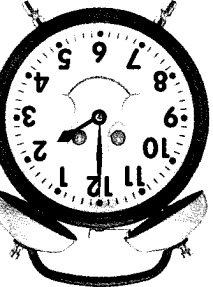
4. Fill in the blanks.

 \_\_\_\_\_

7.00

← 1 h later

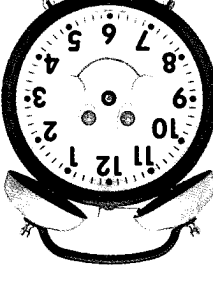
\_\_\_\_\_

 \_\_\_\_\_

\_\_\_\_\_

← h later

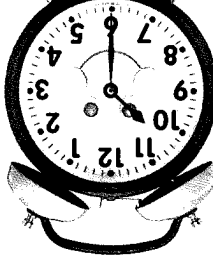
\_\_\_\_\_

 \_\_\_\_\_

12.00

← Half an hour later

\_\_\_\_\_

 \_\_\_\_\_

\_\_\_\_\_

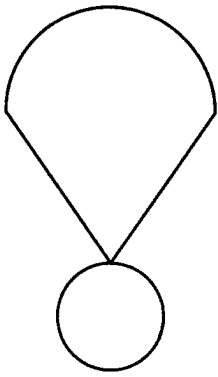
← min later

\_\_\_\_\_

# Exercise Three



1. What shapes are these figures made up of? Draw lines to show the shapes then write the name of the shapes.

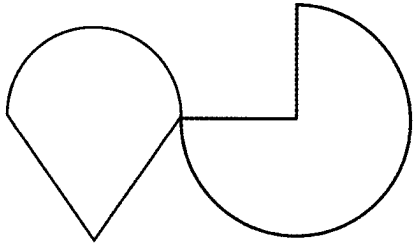


(b)

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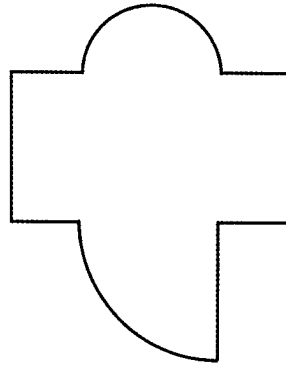


(p)

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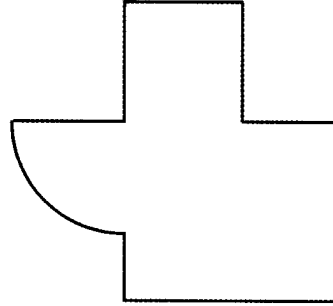


(a)

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(c)

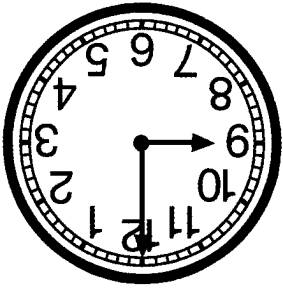
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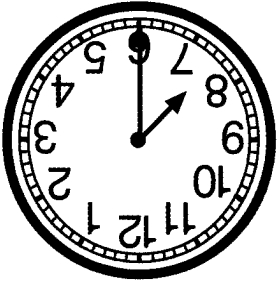
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2. Do these word problems.

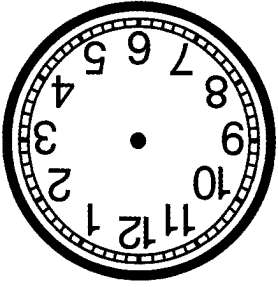
(a) Omar left his house at 8.00 a.m. He reached his office 1 hour later. At what time did he reach his office?



(b) Lucas was half an hour late for school. He reached school at 7.30 a.m. At what time should he be in school so that he will be on time?



(c) Ron wants to watch a cartoon programme on TV. The programme will start in 1 hour. It is now 6.00 p.m. At what time will the programme start? Draw the missing hands on the clock to show the time the programme starts.



- (a) Who made the most number of paper flowers?  
\_\_\_\_\_
- (b) How many more flowers did Jane make than Hillary?  
\_\_\_\_\_
- (c) How many flowers were made in all?  
\_\_\_\_\_


Use one 'X' to stand for 2 paper flowers. Complete the graph and then answer the questions.

Lydia : 16	Karen : 20	Hillary : 8	Siti : 18
Jane : 12	Jenny : 14		

3. 6 girls made paper flowers as shown: