#### PREFACE

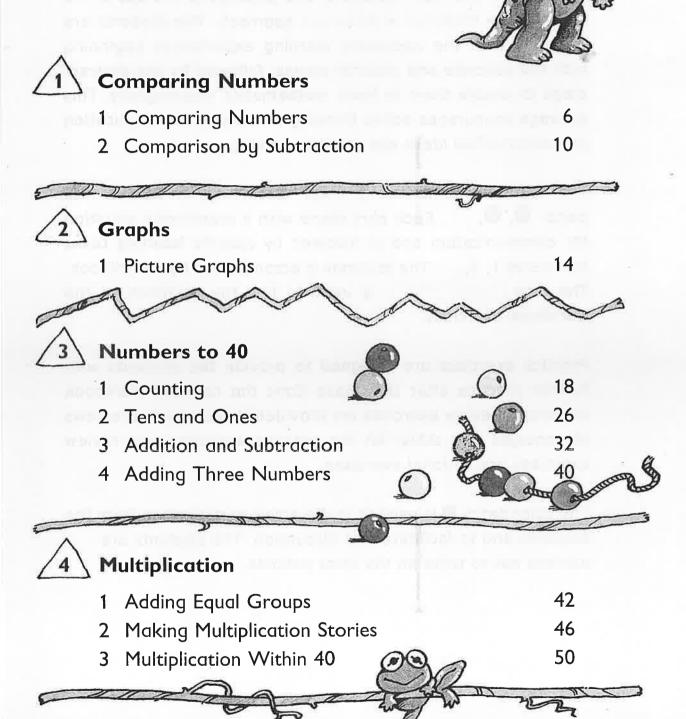
Primary Mathematics (U.S. Edition) comprises textbooks and workbooks. The main feature of this package is the use of the Concrete → Pictorial → Abstract approach. The students are provided with the necessary learning experiences beginning with the concrete and pictorial stages, followed by the abstract stage to enable them to learn mathematics meaningfully. This package encourages active thinking processes, communication of mathematical ideas and problem solving.

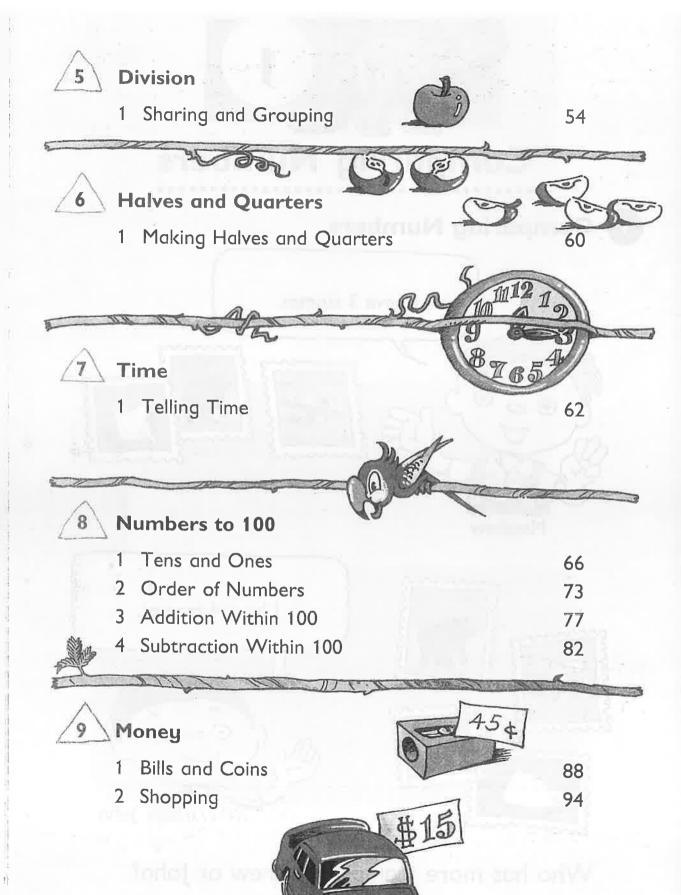
The textbook comprises 9 units. Each unit is divided into parts: ①, ②, . . . Each part starts with a meaningful situation for communication and is followed by specific learning tasks numbered 1, 2, . . . The textbook is accompanied by a workbook. The sign Workbook Exercise is used to link the textbook to the workbook exercises.

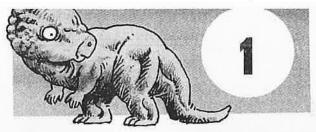
Practice exercises are designed to provide the students with further practice after they have done the relevant workbook exercises. Review exercises are provided for cumulative reviews of concepts and skills. All the practice exercises and review exercises are optional exercises.

The color patch is used to invite active participation from the students and to facilitate oral discussion. The students are advised not to write on the color patches.

# CONTENTS



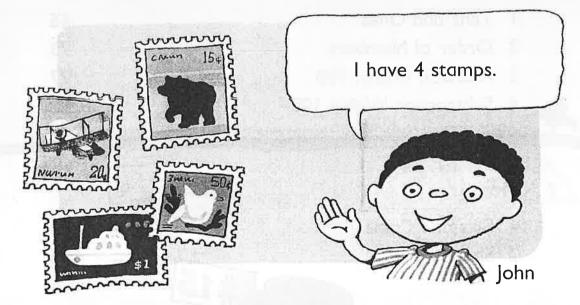




# **Comparing Numbers**

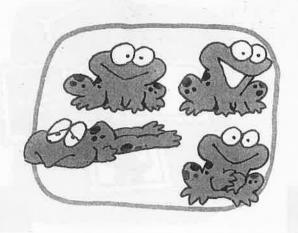
## **1** Comparing Numbers

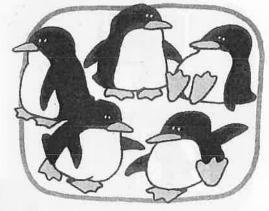




Who has more stamps, Matthew or John?

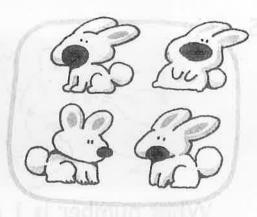
## 1. Are there more frogs than penguins?



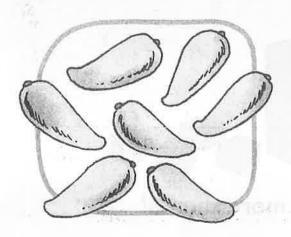


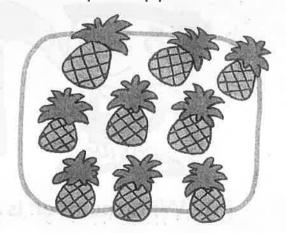
## 2. Are there more carrots than rabbits?



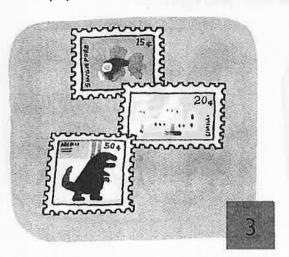


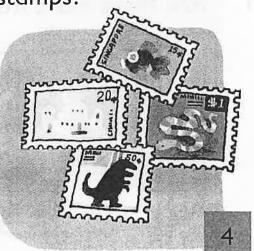
## 3. Are there more mangoes than pineapples?





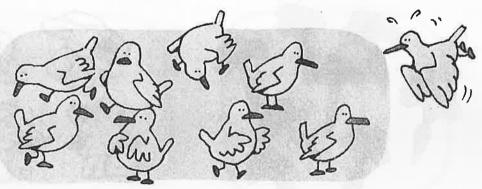
4. (a) Which set has more stamps?





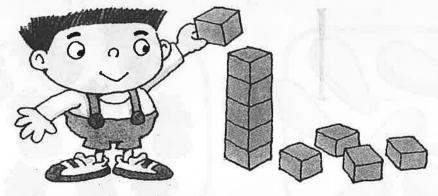
(b) What number is 1 more than 3?





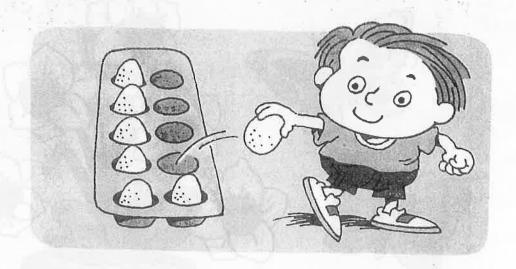
What number is 1 more than 8?

6. (a) What number is 1 more than 5?



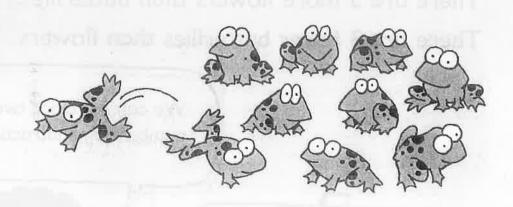
(b) What number is 1 more than 6?

## 7. (a) What number is 1 less than 7?



(b) What number is 1 less than 6?

8.

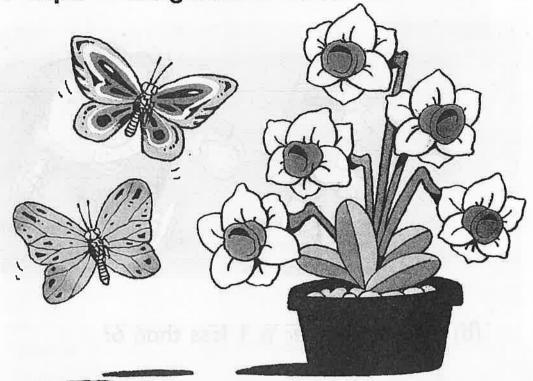


What number is 1 less than 10?

- 9. (a) What number is 1 more than 7?
  - (b) What number is 1 less than 9?

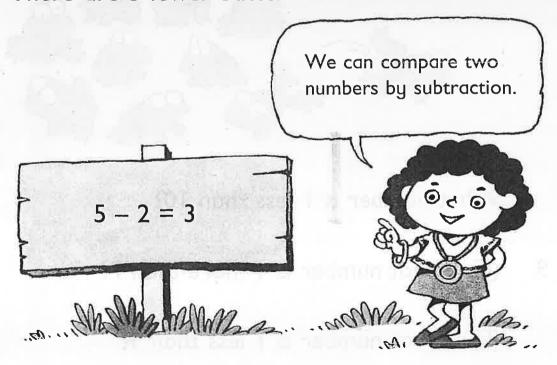
2

**Comparison by Subtraction** 

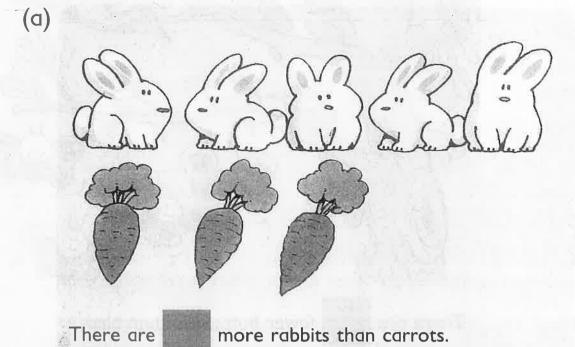


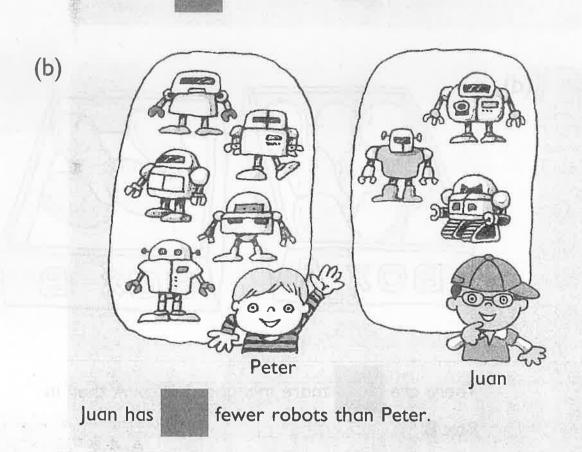
There are 3 more flowers than butterflies.

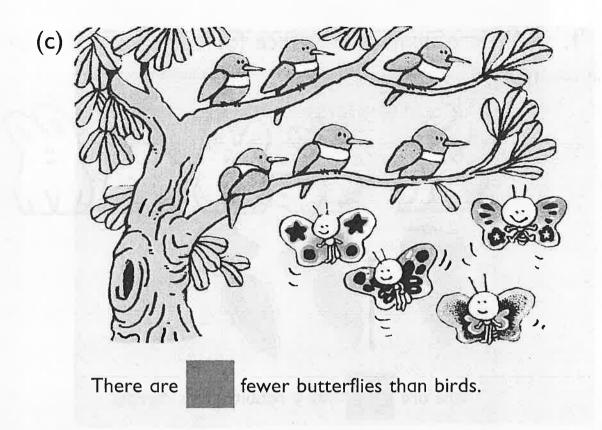
There are 3 fewer butterflies than flowers.

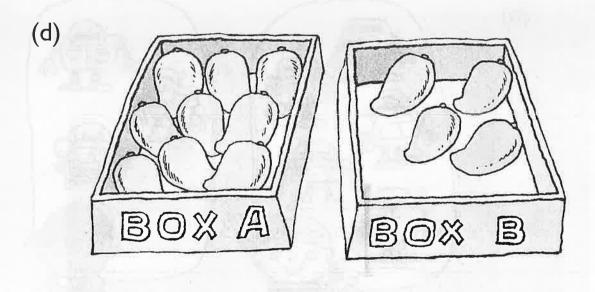


1. Write a number sentence for each story.

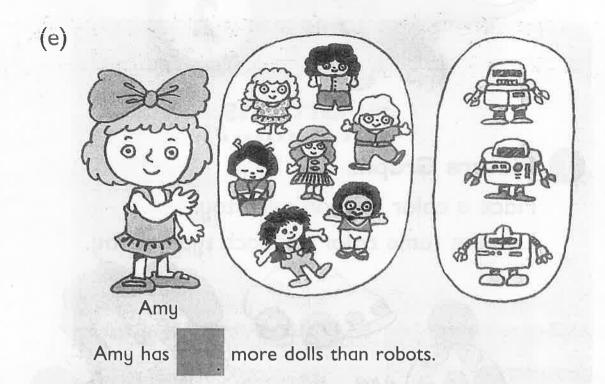


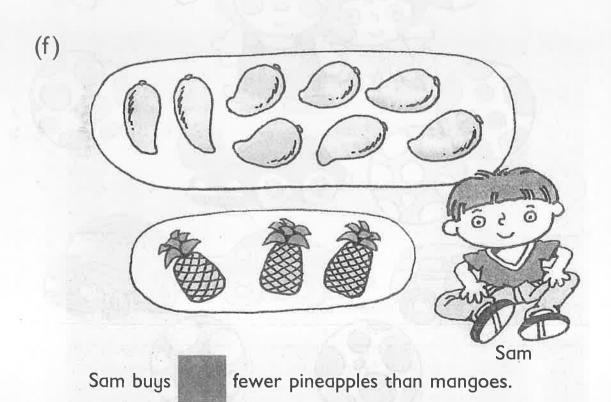






There are more mangoes in Box A than in Box B.

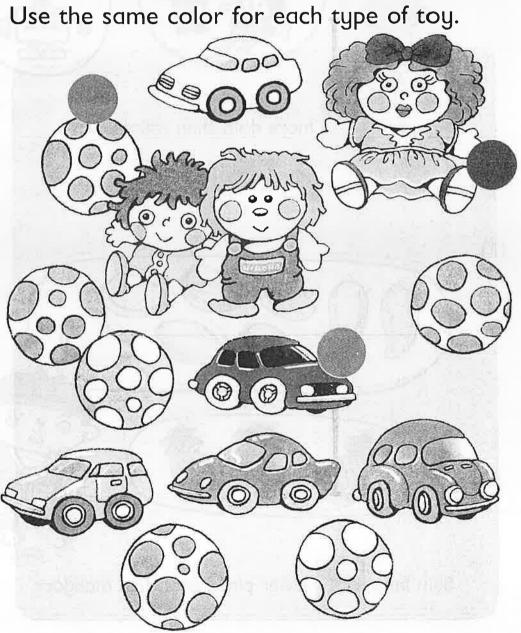




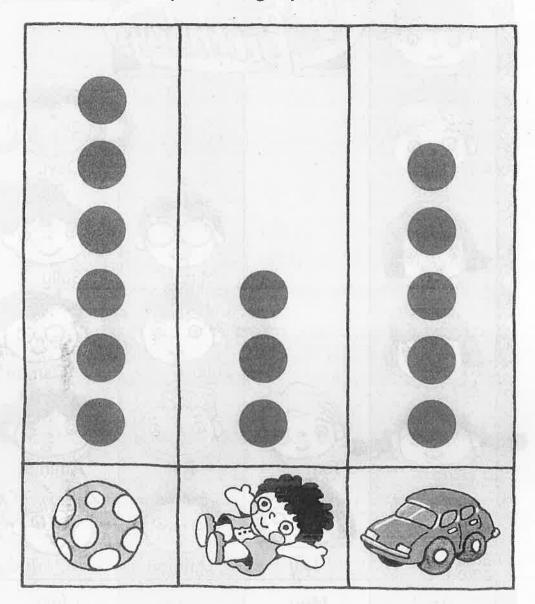


## **Picture Graphs**

Place a color chip on each toy.



Then make a picture graph like this:

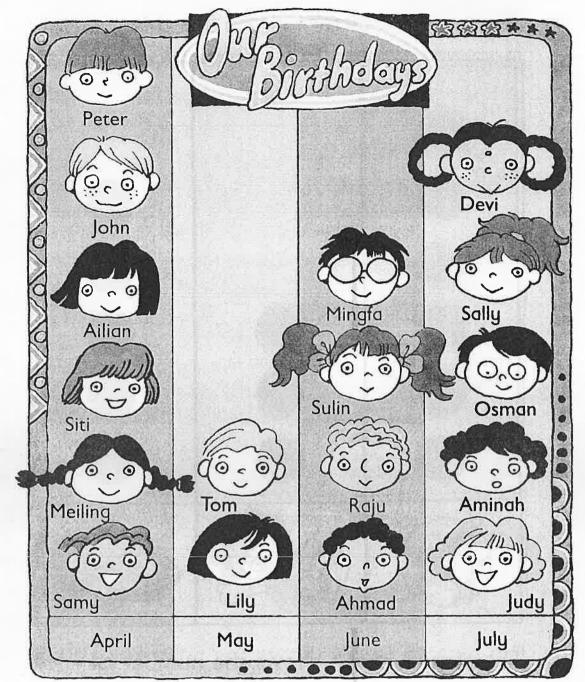


The picture graph shows the number of each type of toy.

How many balls are there?

How many more cars than dolls are there?
How many fewer cars than balls are there?
How many toys are there altogether?

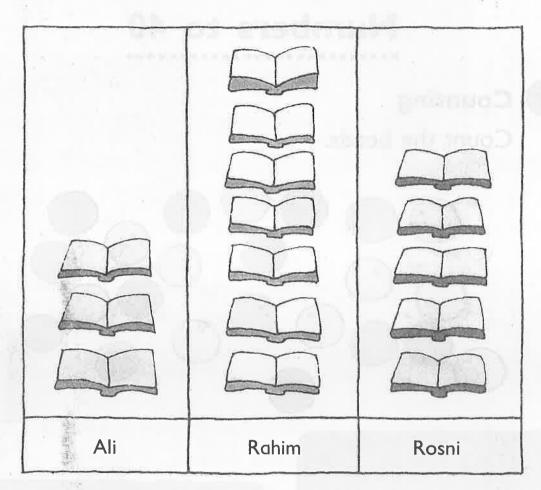
1.



- (a) children have their birthdays in July.
- (b) more children have their birthdays in July than in May.

2. Ali, Rahim and Rosni like to read books.

This picture graph shows the number of books they read last week.



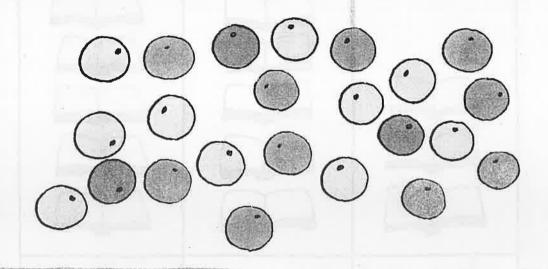
- (a) Ali read books.
- (b) read the most books.
- (c) Rosni read more books than Ali.
- (d) They read books altogether.



## Numbers to 40

## Counting

Count the beads.



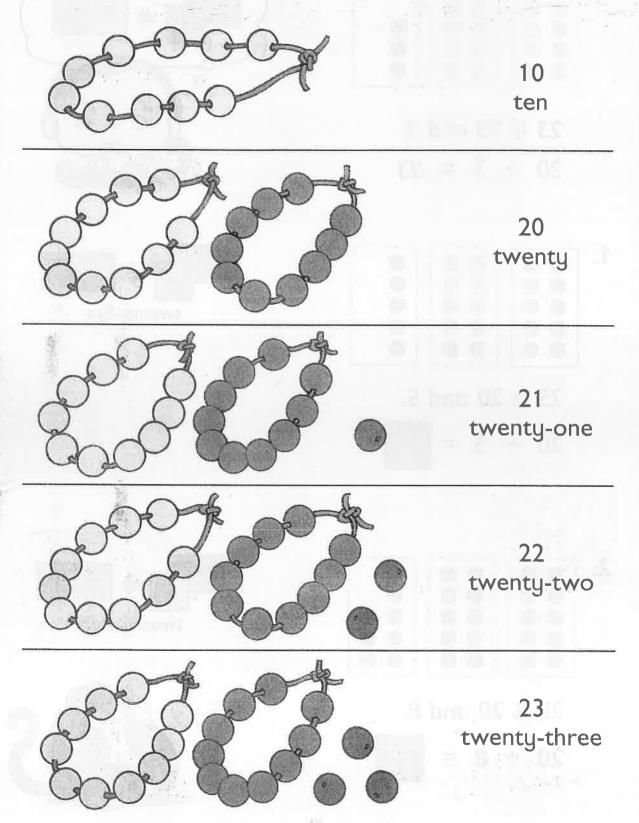
There are more than 20 beads.

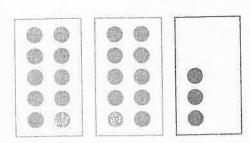
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, . . .





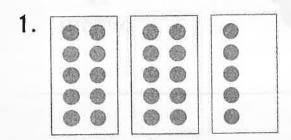
#### Make tens and count.



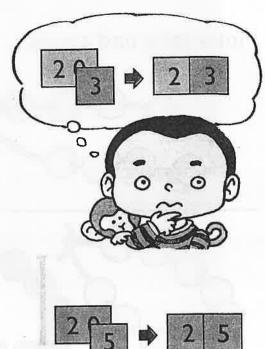


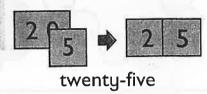
23 is 20 and 3.

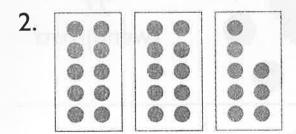
$$20 + 3 = 23$$



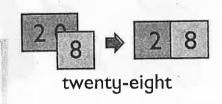
25 is 20 and 5.







28 is 20 and 8.





22 23 24 25 26 27 28 31 32 33 34 35 36 37 38 39 40

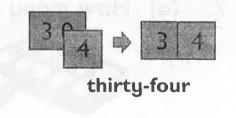
3.

29 and 1 make 30.

10, 20, 30

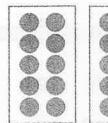
thirty

4.



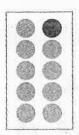
30 and 4 make 34.

5.











forty

1 more than 39 is 40.

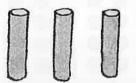


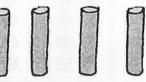
6. (a) How many sticks are there?









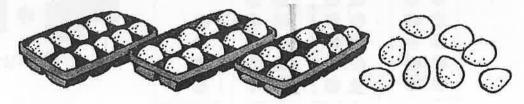


(b) 
$$20 + 6 =$$

(c) 6 more than 20 is



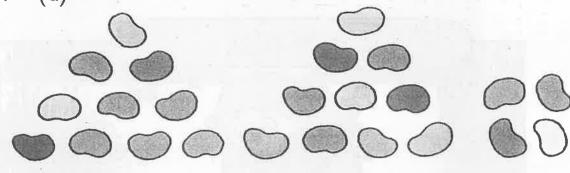
7. (a) How many eggs are there?

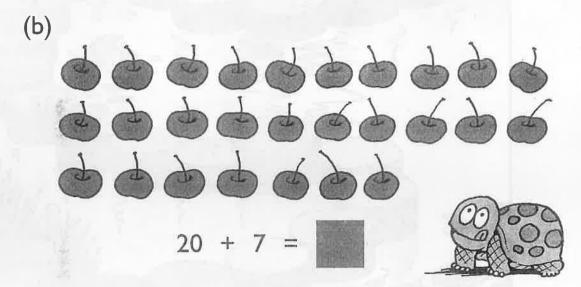


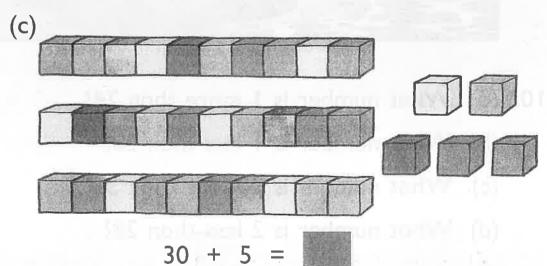
(c) 8 more than 30 is



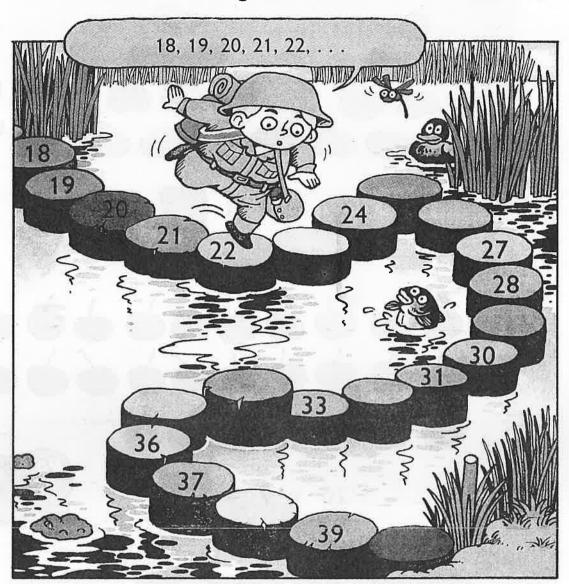






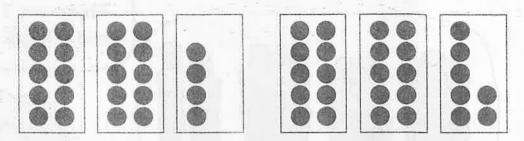


#### 9. What are the missing numbers?

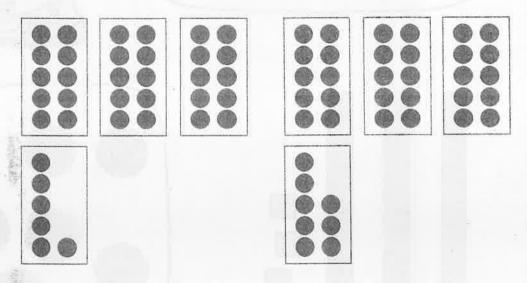


- 10. (a) What number is 1 more than 24?
  - (b) What number is 1 less than 30?
  - (c) What number is 2 more than 36?
  - (d) What number is 2 less than 28?

### 11. (a) Which is greater, 24 or 27?



(b) Which is smaller, 36 or 38?



12. Compare these numbers.

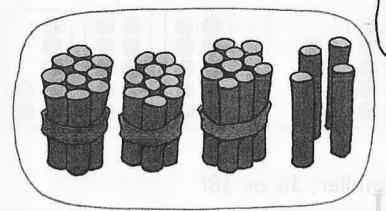


- (a) Which number is the greatest?
- (b) Which number is the smallest?
- (c) Arrange the numbers in order.

  Begin with the smallest.

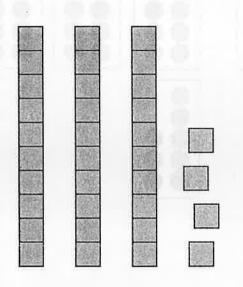


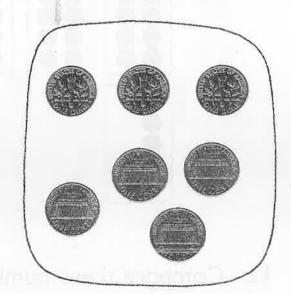
#### 2 Tens and Ones



There are 3 tens and 4 loose ones.





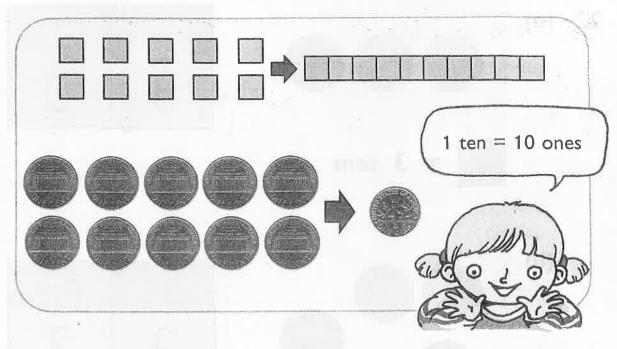


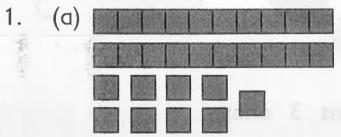
Tens	Ones
•	
3	4

34 = 3 tens 4 ones

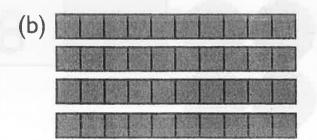


thirty-four





Tens	Ones
2	9



Tens	Ones
4	0





Tens	Ones
3	0

= 3 tens

(b)



Tens	Ones
2	3

= 2 tens 3 ones

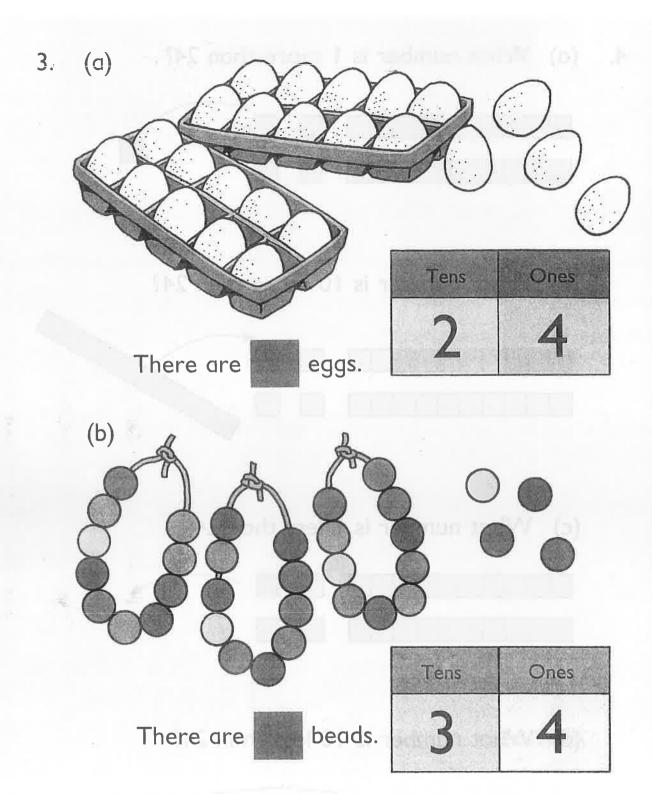
(c)



Tens	Ones
3	8

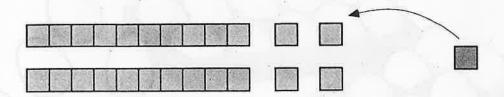


= 3 tens 8 ones

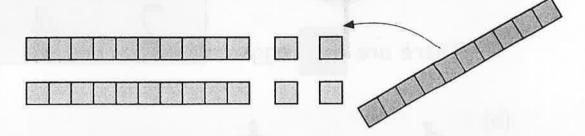


(c) Are there more eggs or more beads? How many more?

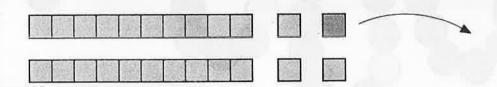
4. (a) What number is 1 more than 24?



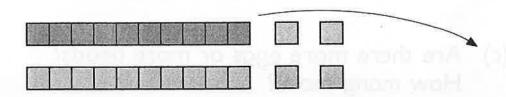
(b) What number is 10 more than 24?



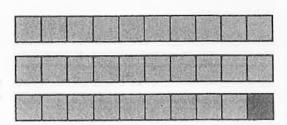
(c) What number is 1 less than 24?



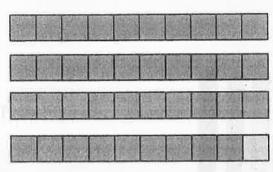
(d) What number is 10 less than 24?



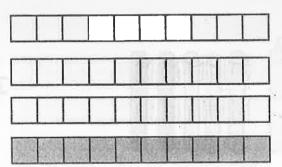
5. (a) What number is 1 more than 29?



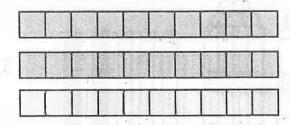
(b) What number is 1 less than 40?



(c) What number is 10 more than 30?

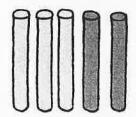


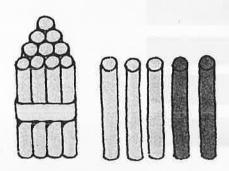
(d) What number is 10 less than 30?

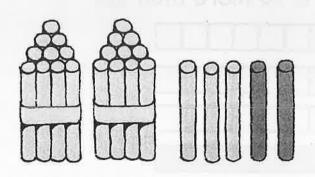


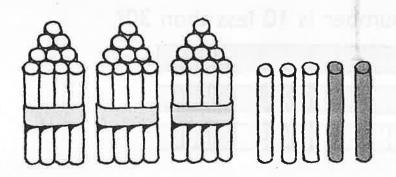


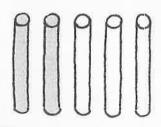
## Addition and Subtraction

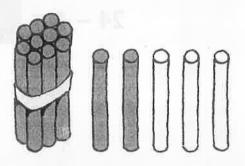


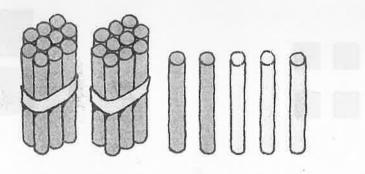


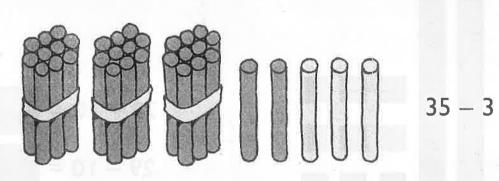






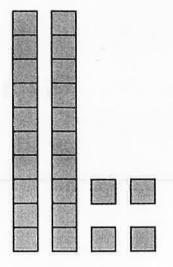




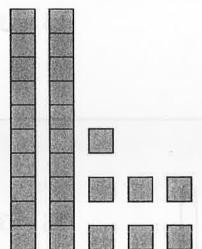


#### 1. Add or subtract.

(a)

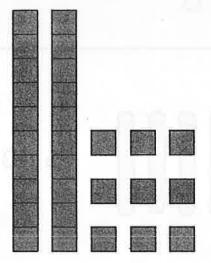


(b)



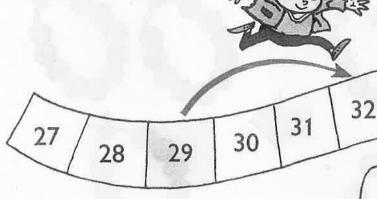
$$27 - 3 =$$

(c)

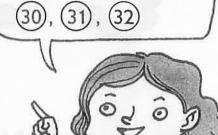


29 + 10 =

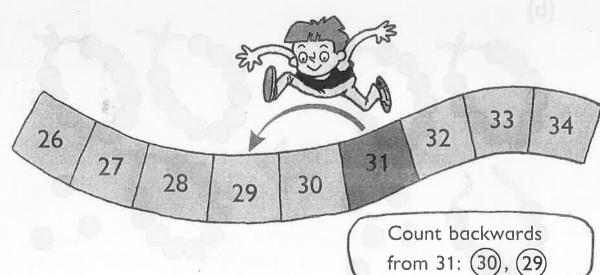




## Count on from 29:

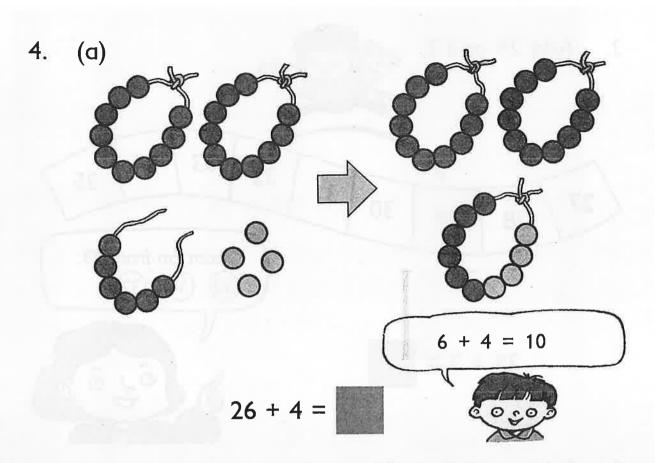


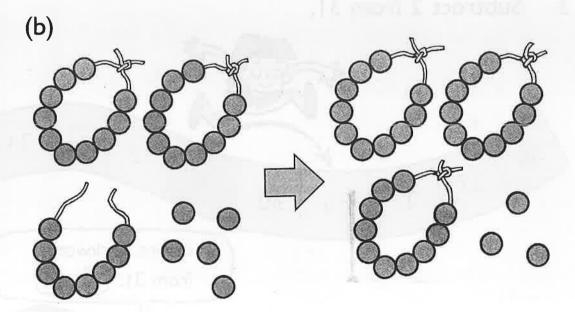
#### 3. Subtract 2 from 31.



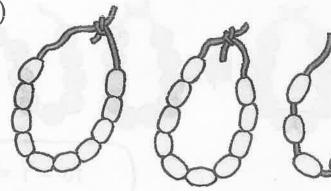
31 – 2 =



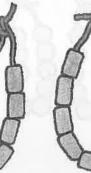




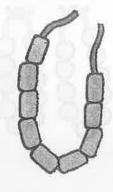
5. (a)

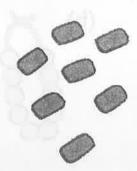


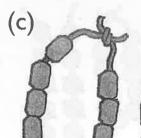
(b)



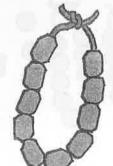


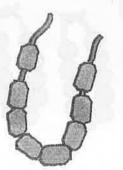


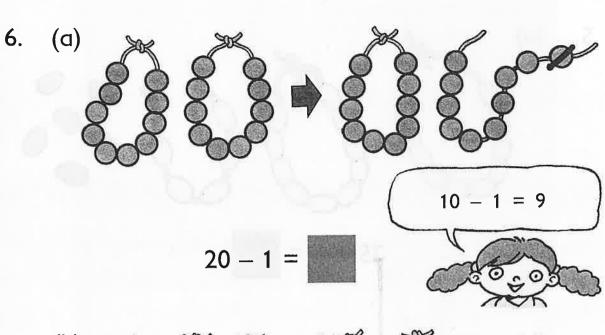


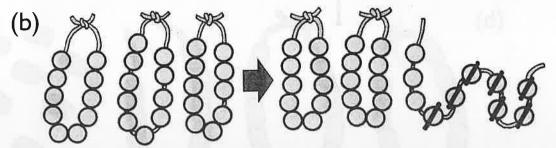


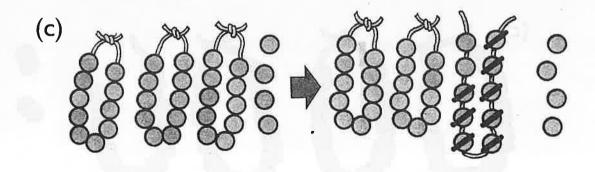


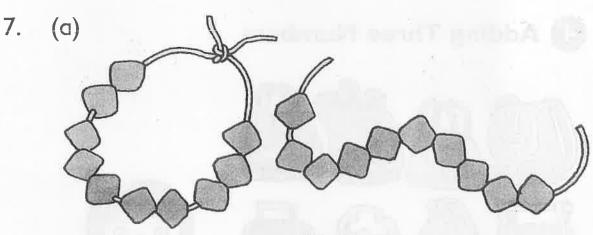


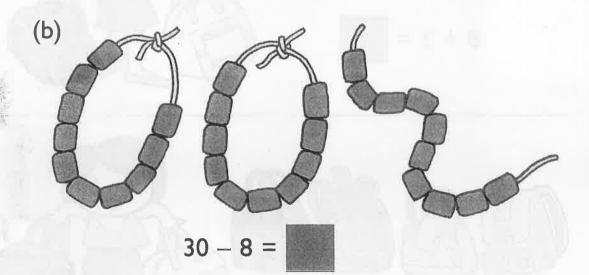


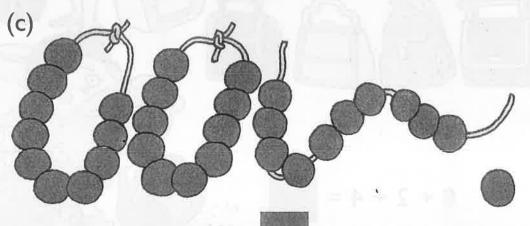












#### **Adding Three Numbers**





1. (a)



5 + 5 =

(b)



5 + 5 + 5 =

2. Complete the addition sentences.

(c) 
$$3 + 2 + 9 =$$

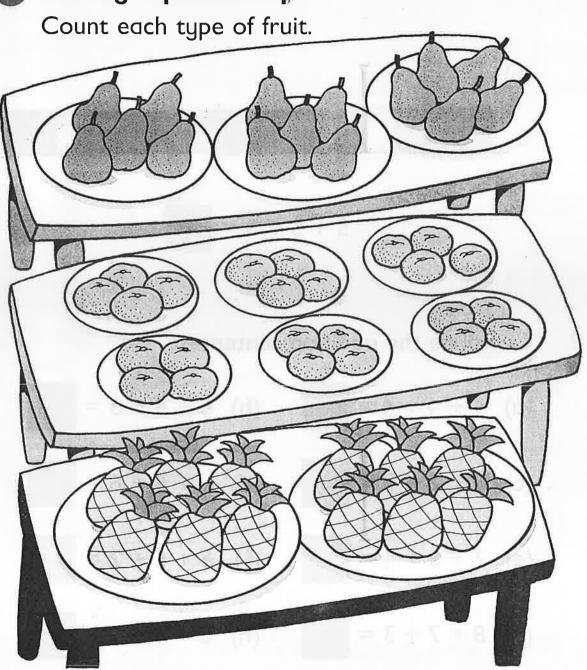
$$(f)$$
 8 + 6 + 2 =

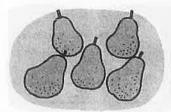
(g) 
$$8 + 7 + 3 =$$

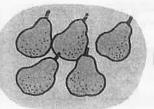


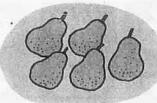
# Multiplication

Adding Equal Groups









There are 5 pears in each group.







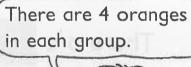


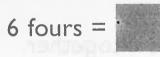




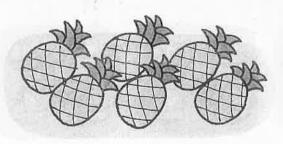


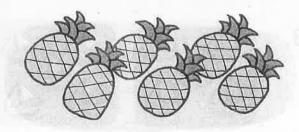






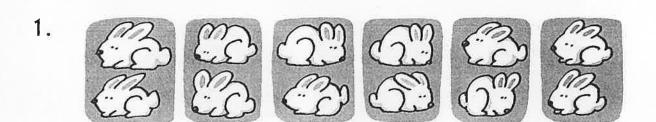






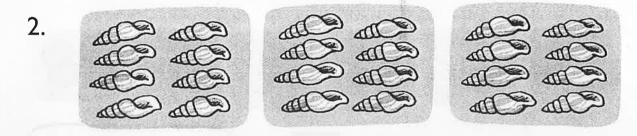
There are 6 pineapples in each group.





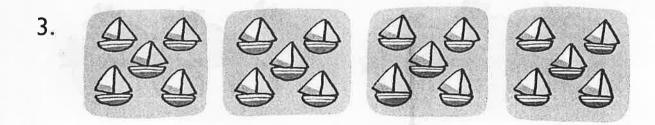
There are rabbits in each group.

There are rabbits altogether.



There are shells in each group.

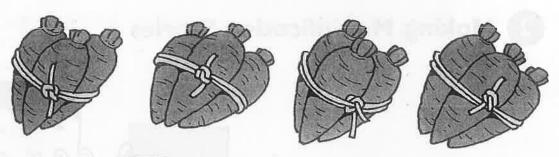
There are shells altogether.



There are boats in each group.

There are boats altogether.





There are



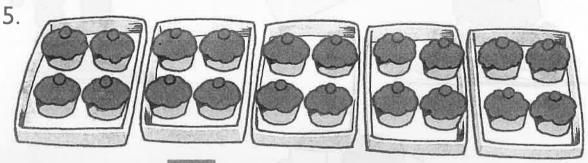
groups of 3.

There are



carrots altogether.





There are



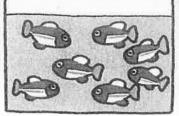
groups of 4.

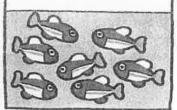
There are



cakes altogether.

6.





There are



groups of

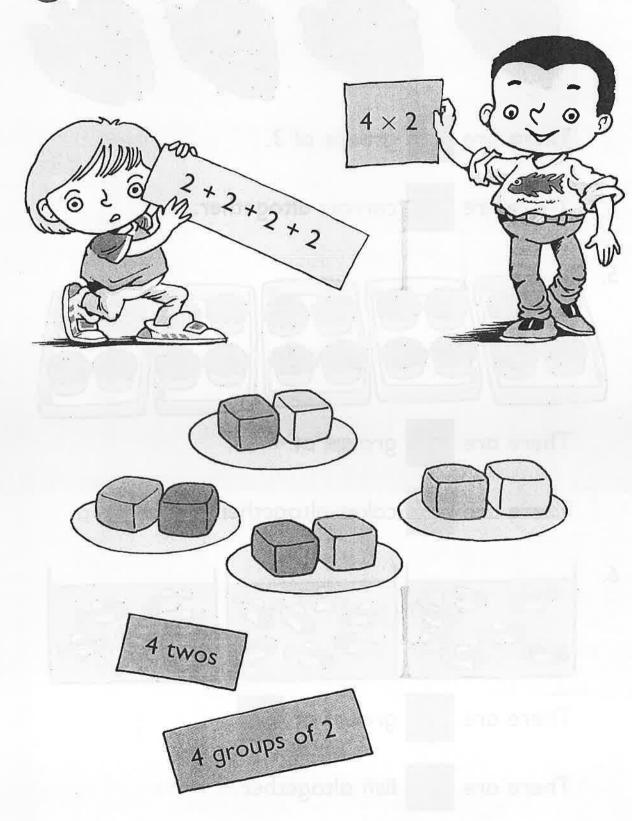


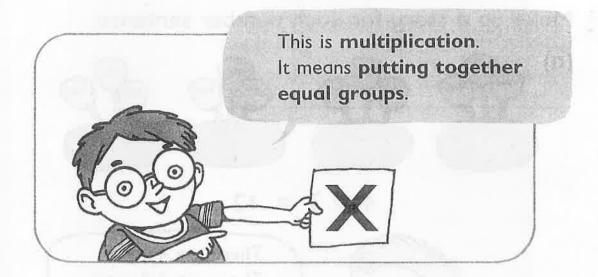
There are



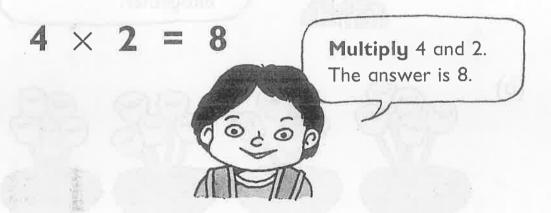
fish altogether.

#### Making Multiplication Stories





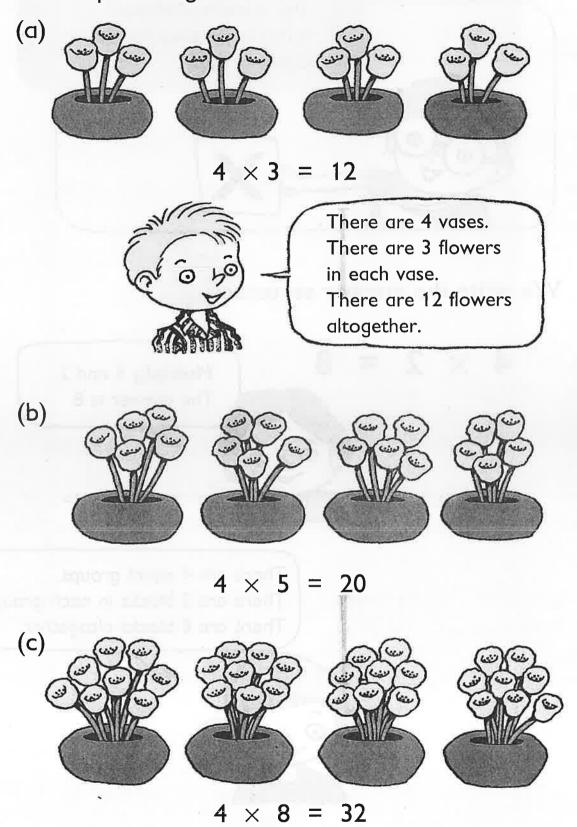
We write the number sentence:



There are 4 equal groups.
There are 2 blocks in each group.
There are 8 blocks altogether.

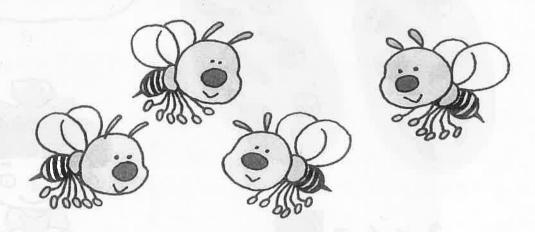


#### 1. Make up a story for each number sentence.

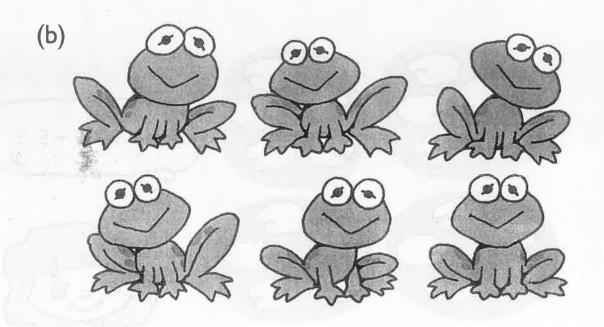


2. Make up a story for each number sentence.

(D)



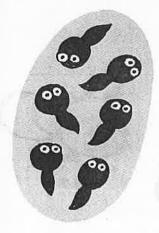
 $4 \times 6 = 24$ 

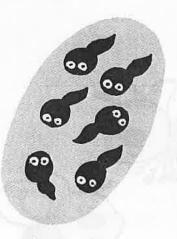


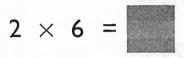
 $6 \times 4 = 24$ 

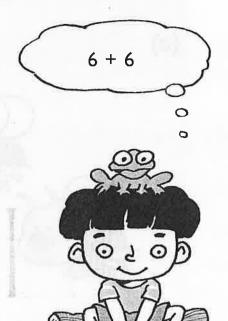
## 

#### **Multiplication Within 40**



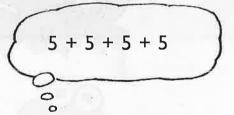


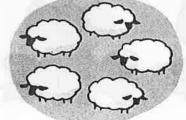


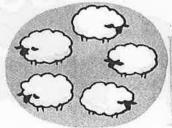




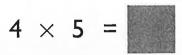




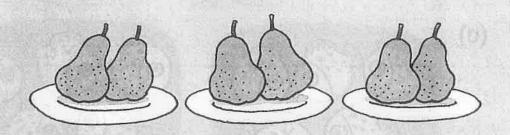








1.

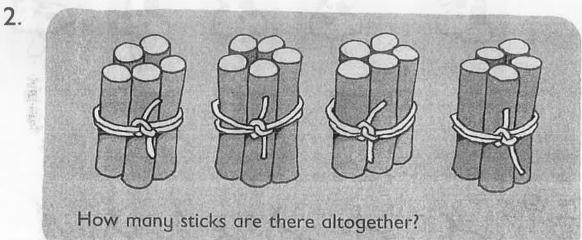


How many pears are there altogether?

There are



pears altogether.

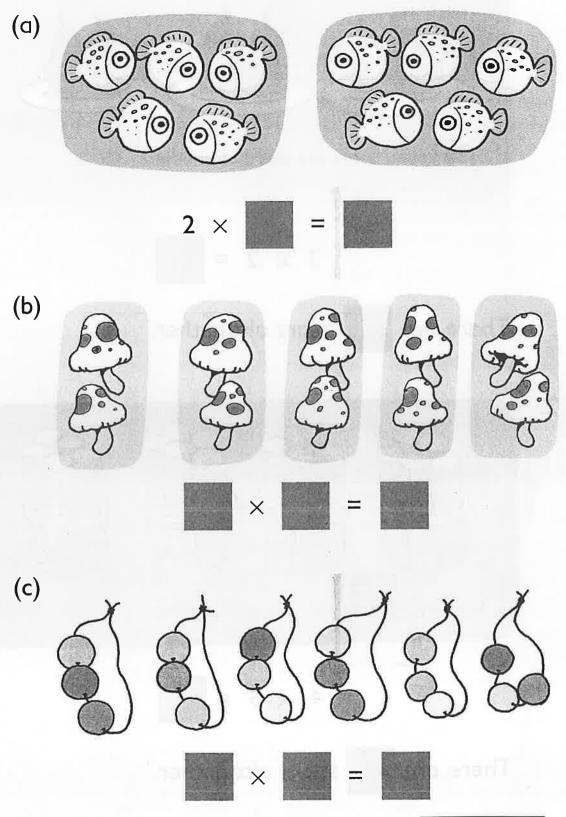


There are



sticks altogether.

## 3. Complete the number sentences.



4.

There are 6 stamps in each row.

How many stamps are there in 3 rows?



There are

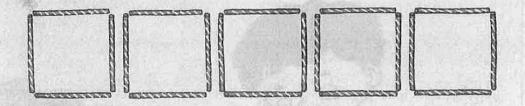


stamps.

5.

Lily made these squares with straws.

How many straws did she use?

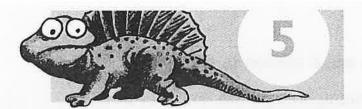


$$5 \times 4 =$$

She used

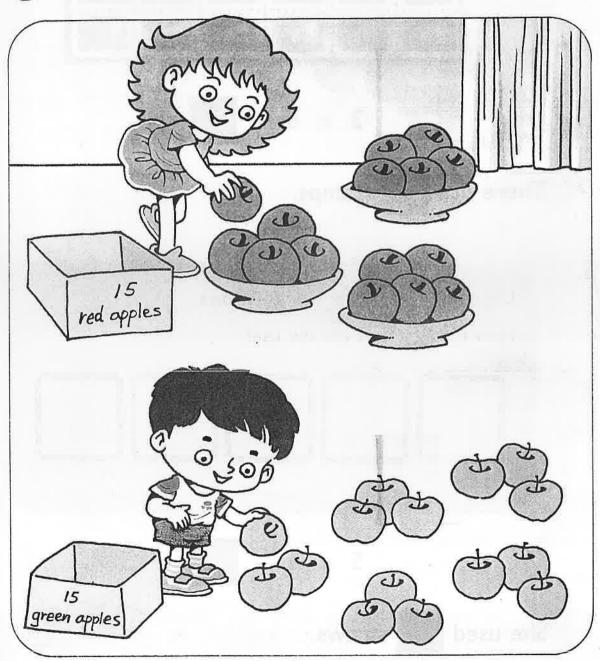


straws.



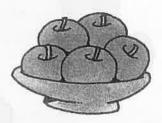
## **Division**

## Sharing and Grouping









I put 15 apples equally on 3 plates.

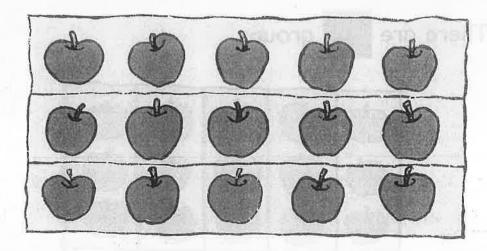


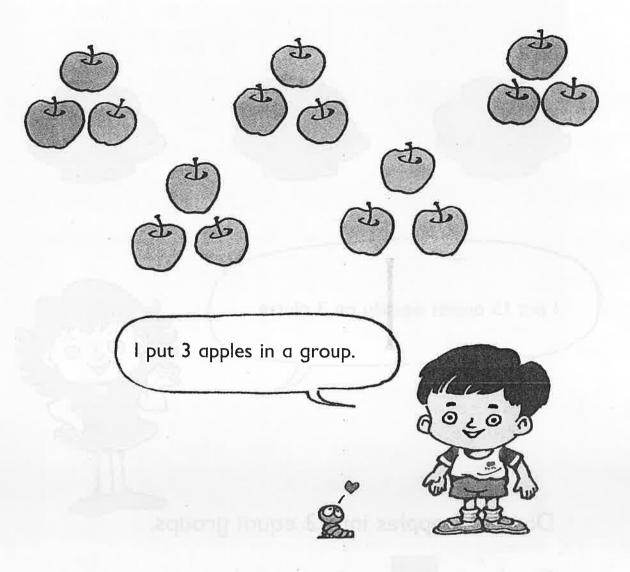
Divide 15 apples into 3 equal groups.

There are

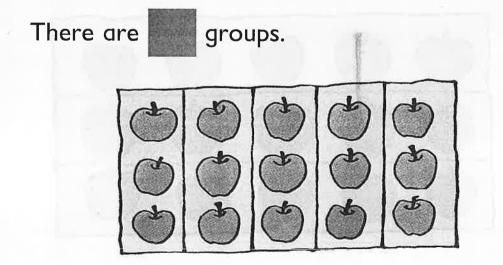


apples in each group.





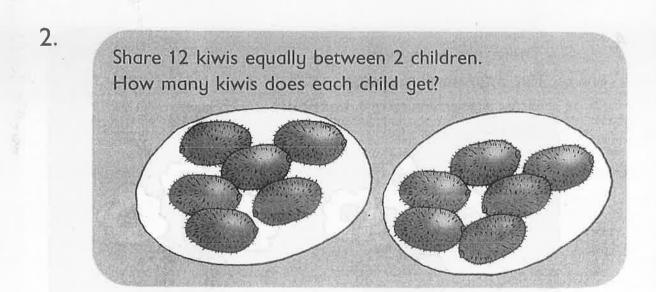
Divide 15 apples into groups of 3.



Divide 10 children into 2 equal groups.

How many children are there in each group?

There are children in each group.



Each child gets kiwis.

3. Put 14 crayons equally into 2 boxes.
How many crayons are there in each box?

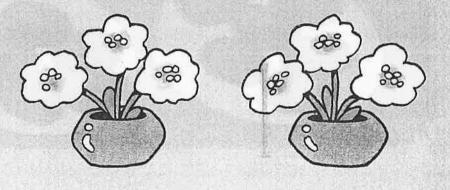
There are crayons in each box.

Workbook Exercises 37 & 38

There are 6 flowers.

Put 3 flowers in a vase.

How many vases are needed?



vases are needed.

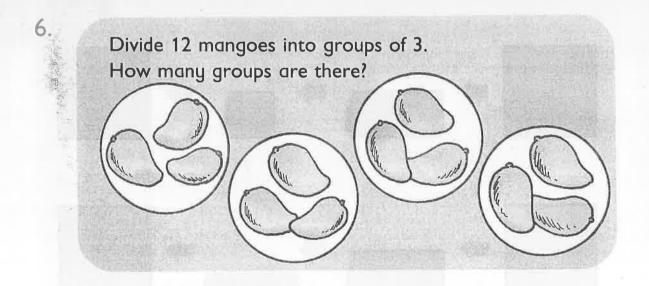
There are 20 coins.

Put 5 coins in a set.

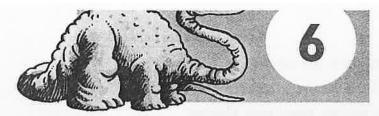
How many sets are there?



There are sets.



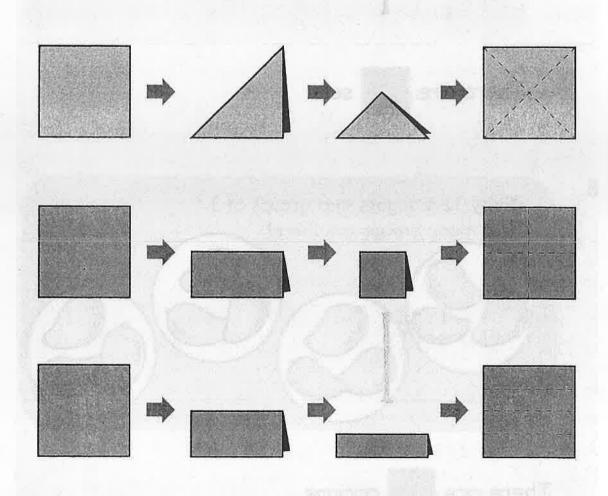
There are groups.



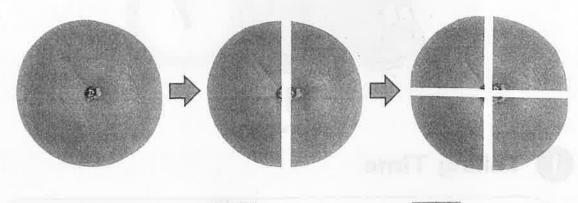
## **Halves and Quarters**

## Making Halves and Quarters

Fold a piece of square paper into **halves**. Then fold it into **quarters**.



1.



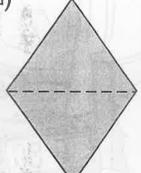
a whole



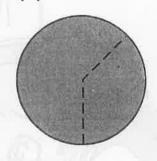


Which pictures show halves? 2.

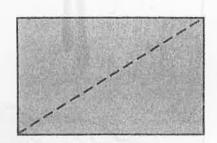
(a)



(b)



(c)

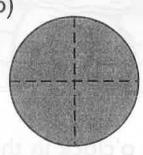


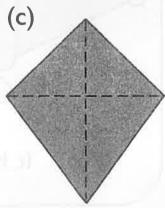
Which pictures show quarters?

(a)



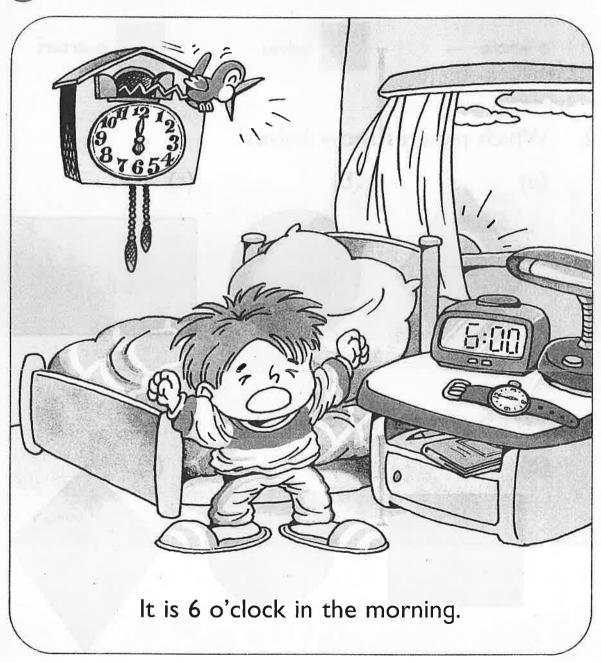
(b)



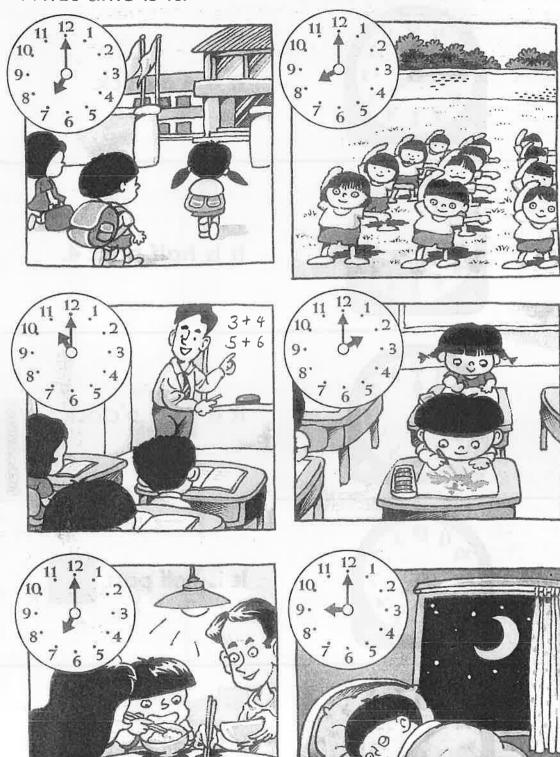




## Telling Time



#### 1. What time is it?





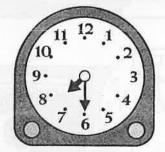
It is 4 o'clock.



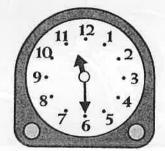
It is half past 4.



It is o'clock.



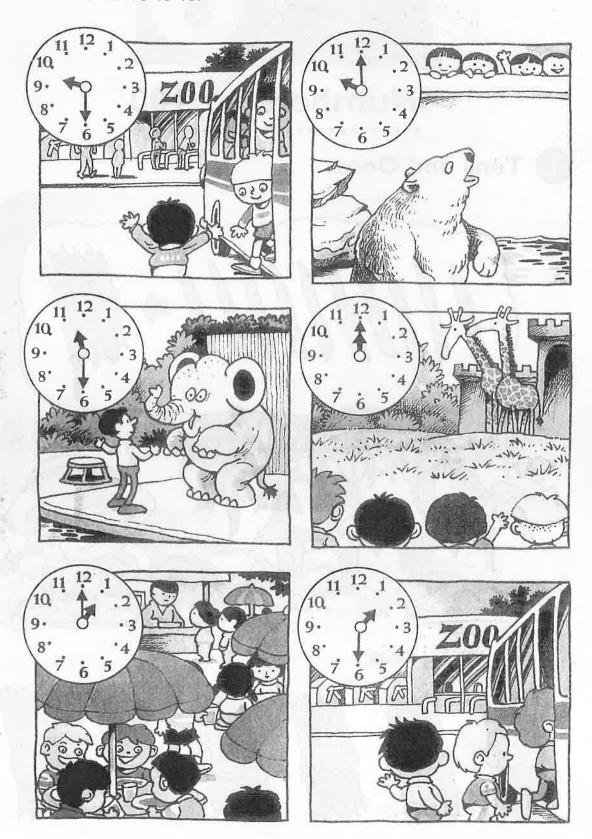
It is half past



It is half past



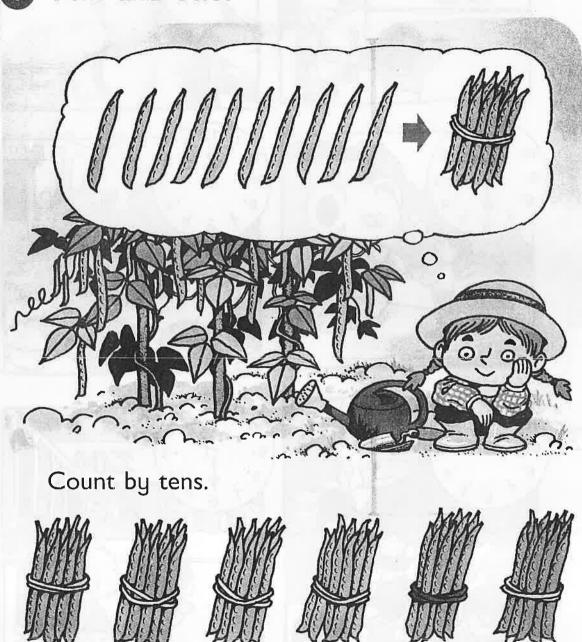
#### 3. What time is it?





## Numbers to 100

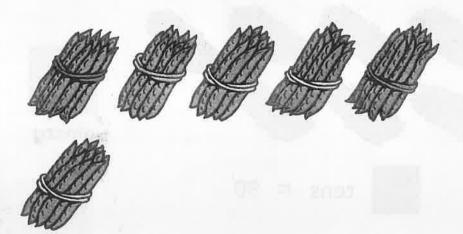
1 Tens and Ones





50 fifty

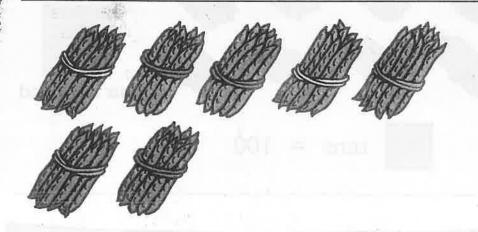
5 tens = 50



60

sixty

6 tens = 60

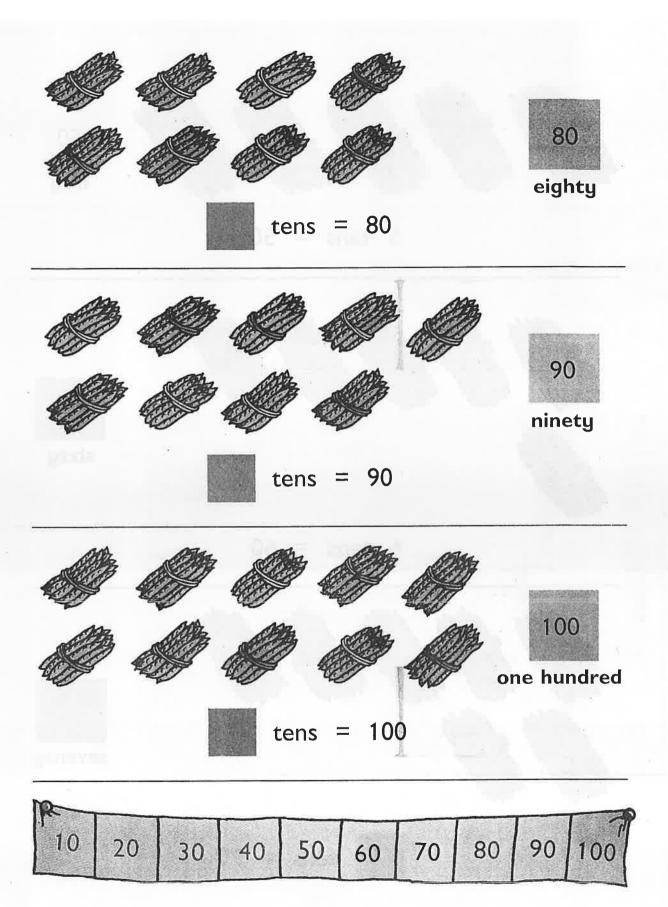


70

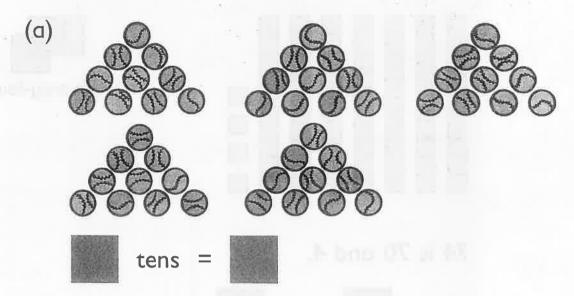
seventy

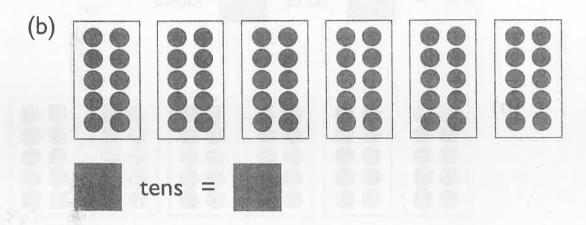


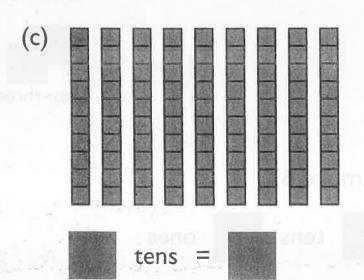
tens = 70



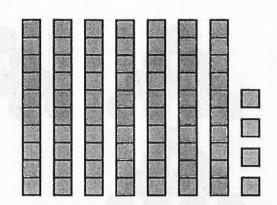
#### 1. Count the tens.







2. (a)



7 4 seventy-four

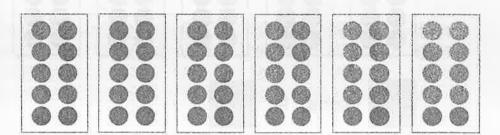
74 is 70 and 4.

tens



ones

(b)





6 3 sixty-three

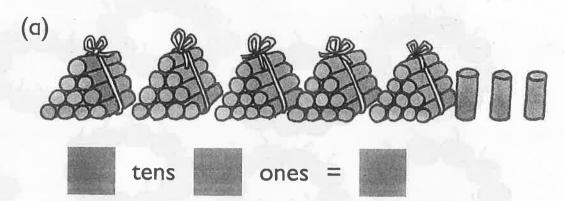
60 and 3 make 63.

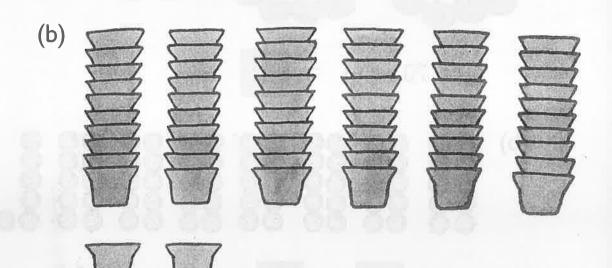
tens



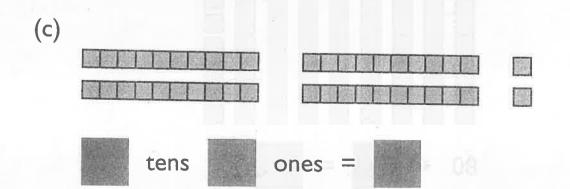
ones

3. Count the tens and ones.

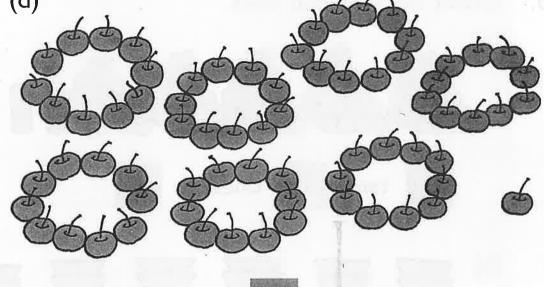








4. (a)



70 + 1 =

(b) 00









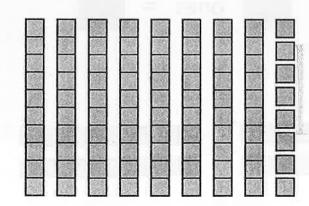








(c)



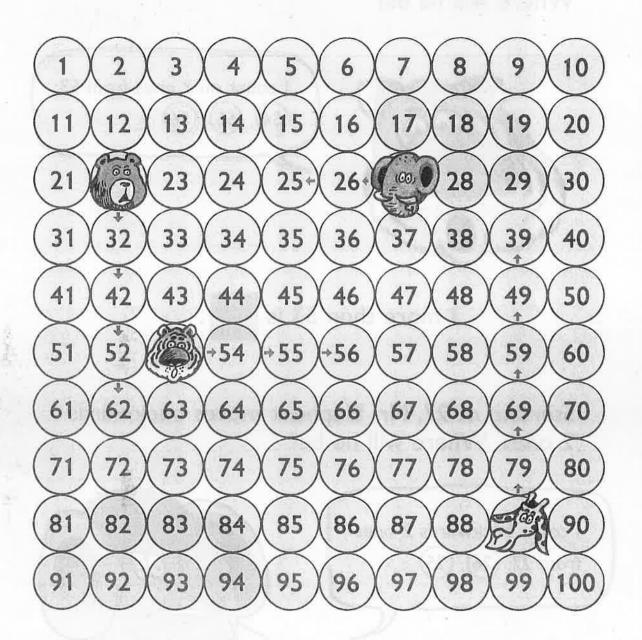
+ 08



=



## 2 Order of Numbers



3.46

Mr. Tiger is at 53.

Where are Mr. Elephant, Mrs. Bear and Miss Giraffe?

Starting at 53, Mr. Tiger moves on 3 ones. Where will he be?



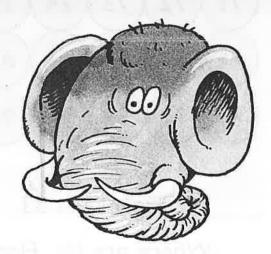
I count on 3 ones from 53: (54), (55), (56)

3 more than 53 is



Starting at 27, Mr. Elephant moves backwards 2 ones. Where will he be?

I count backwards 2 ones from 27: (26), (25)

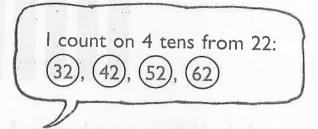


2 less than 27 is



Starting at 22, Mrs. Bear moves on 4 tens. Where will she be?





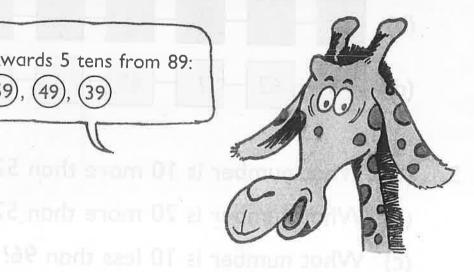
40 more than 22 is



Starting at 89, Miss. Giraffe moves backwards 5 tens. Where will she be?

I count backwards 5 tens from 89:

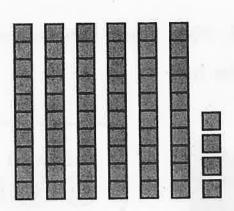
(69), (59), (49), (39)



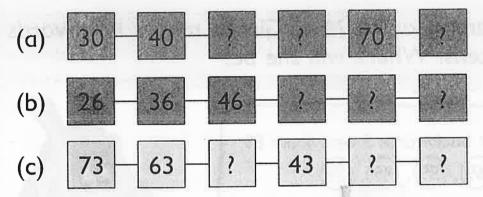
50 less than 89 is



1.



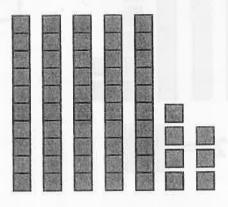
- (a) What number is 1 more than 64?
- (b) What number is 1 less than 64?
- (c) What number is 10 more than 64?
- (d) What number is 10 less than 64?
- 2. What are the missing numbers?



- 3. (a) What number is 10 more than 52?
  - (b) What number is 20 more than 52?
  - (c) What number is 10 less than 96?
  - (d) What number is 20 less than 96?

3 Addition Within 100

Add 54 and 3.

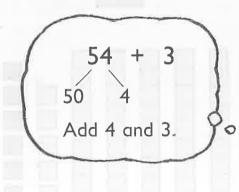


0

Count on 3 ones from 54:

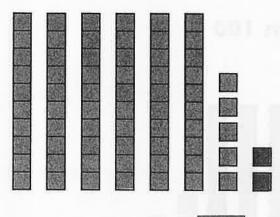
(55), (56), (57)



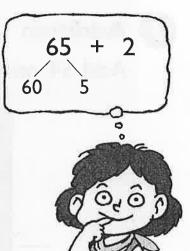




1.

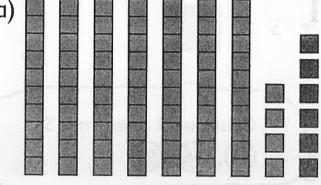


65 + 2 =

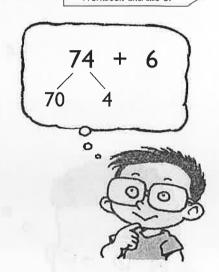


Workbook Exercise 57

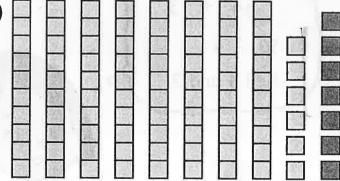
2. (a)



74 + 6 =

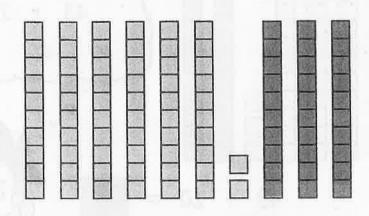


(b)



86 + 7 =

#### Add 62 and 30. 3.



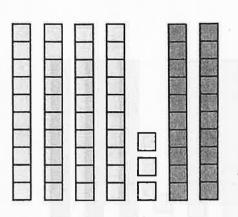


0

Count on 3 tens from 62: (72), (82), (92)



**4**. (a)

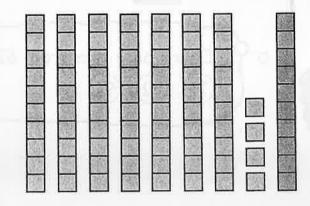


43 + 20 =



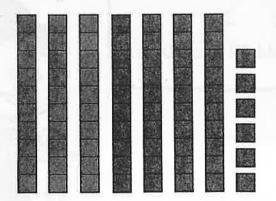
20

(b)



74 + 10 =

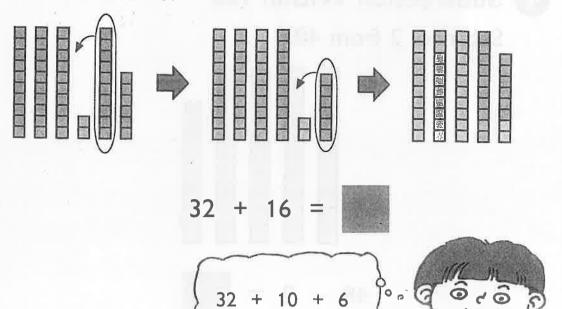
(c)



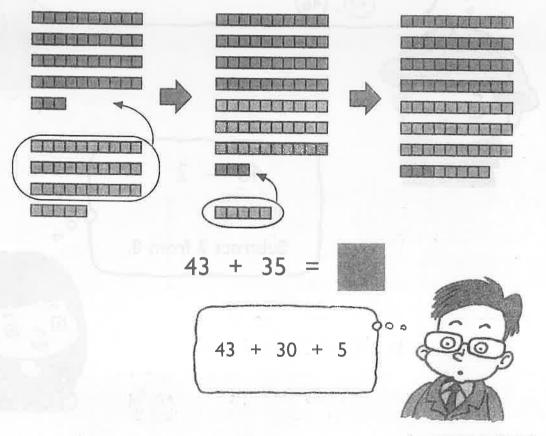
30 + 46 =



5. Add 32 and 16.



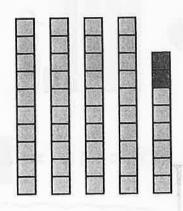
6. Add 43 and 35.

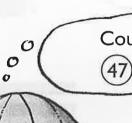


4

### **Subtraction Within 100**

Subtract 2 from 48.



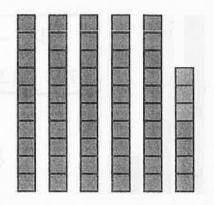


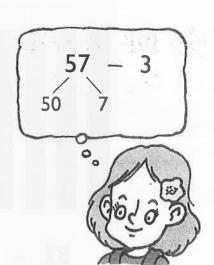
Count backwards 2 ones from 48:



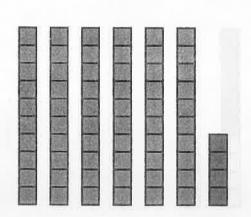
Subtract 2 from 8.





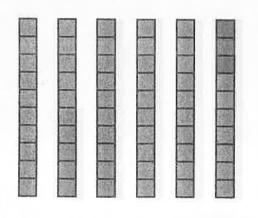


(b)

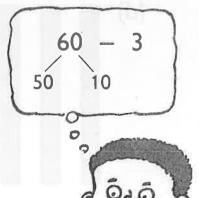


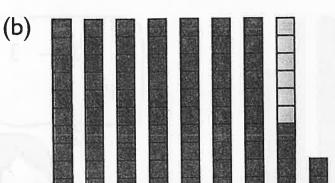
Workbook Exercise 62

2. (a)

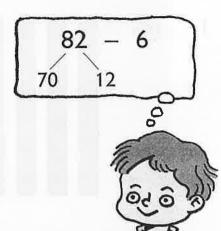


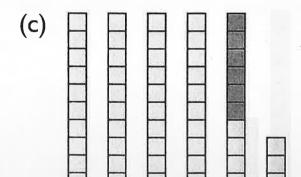
83

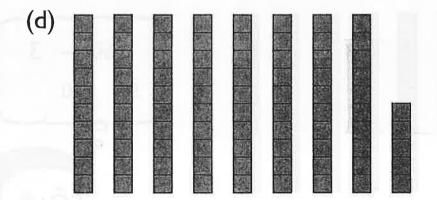




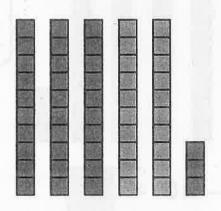








3. Subtract 20 from 53.



Count backwards 2 tens from 53:

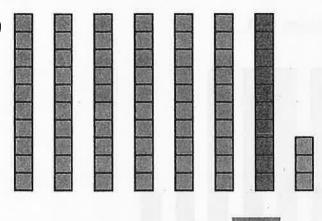
(43), (33)

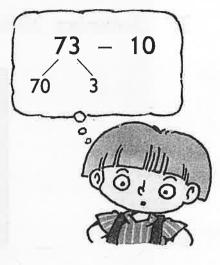


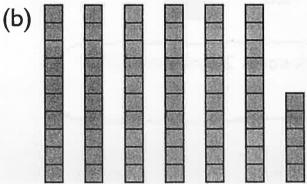
Subtract 20 from 50.



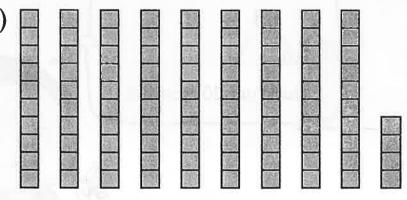
(a)





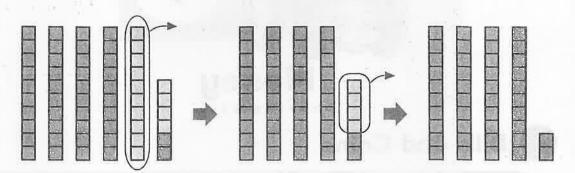


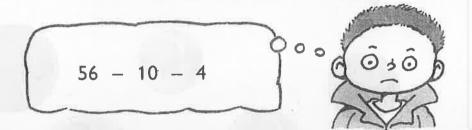
(c)



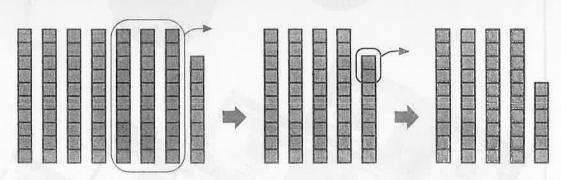


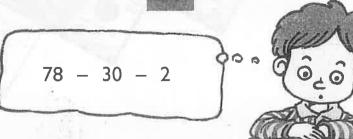
5. Subtract 14 from 56.





6. Subtract 32 from 78.







# Bills and Coins

We use these coins and bills in the U.S. Do you know their values?









A half-dollar can be changed for



dimes.







A one-dollar bill can be changed for



dimes.







A five-dollar bill can be changed for



one-dollar bills.





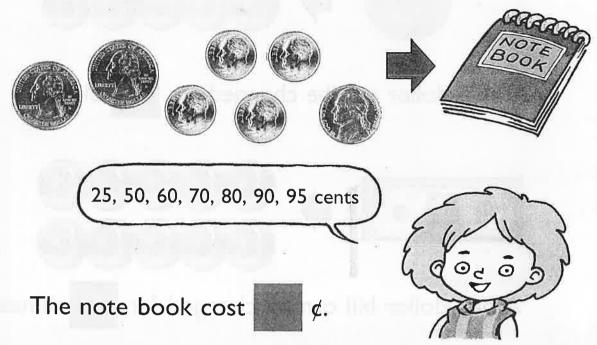


A ten-dollar bill can be changed for

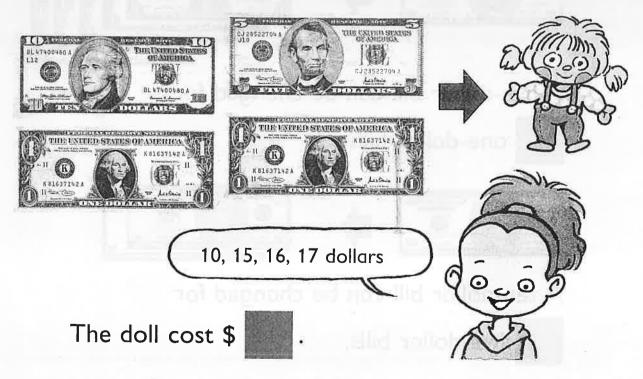


five-dollar bills.

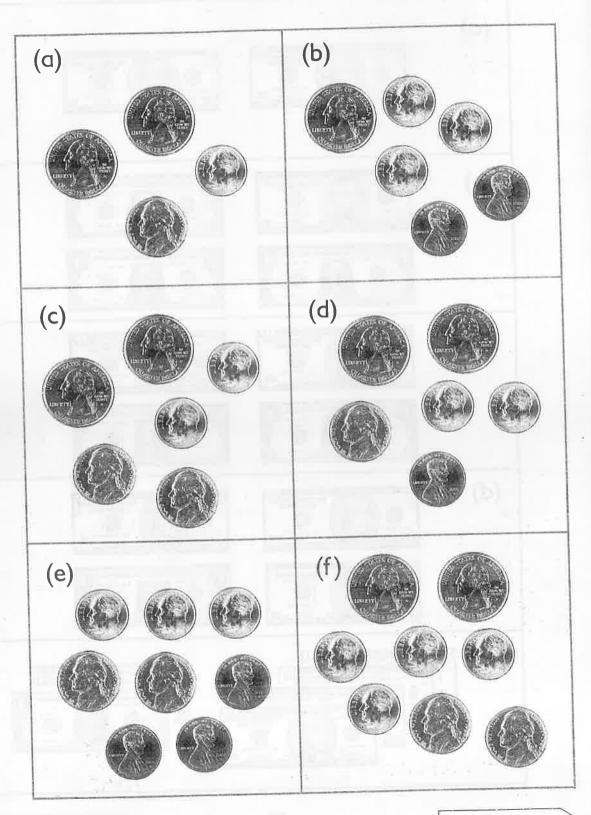
1. Mary paid this amount of money for a note book.



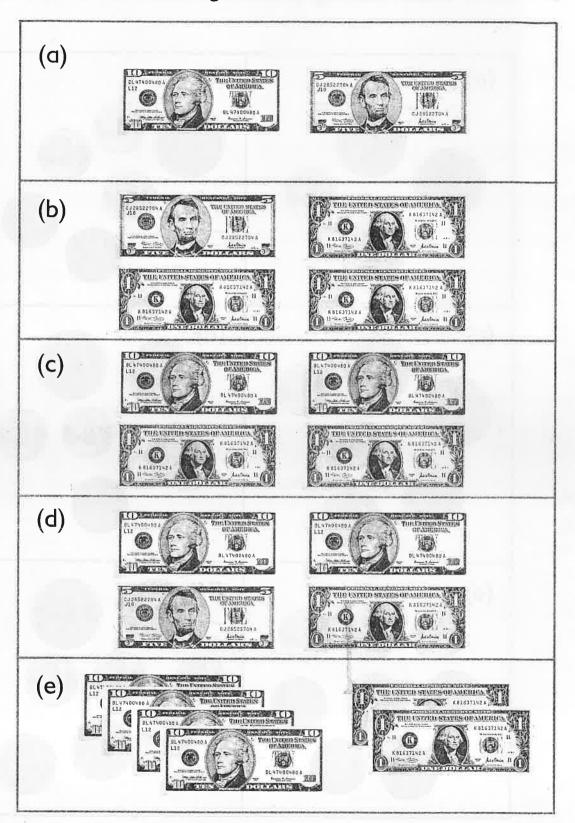
2. Maria paid this amount of money for a doll.



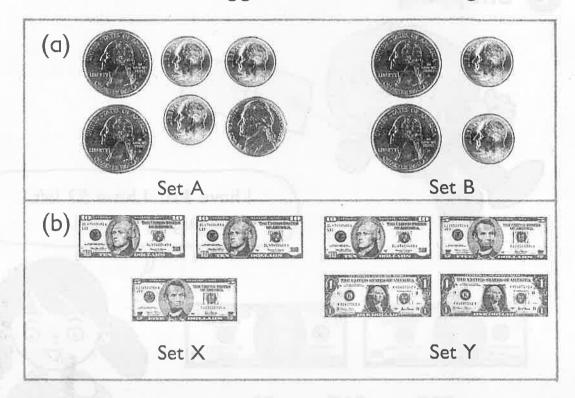
# 3. How much money is there in each set of coins?



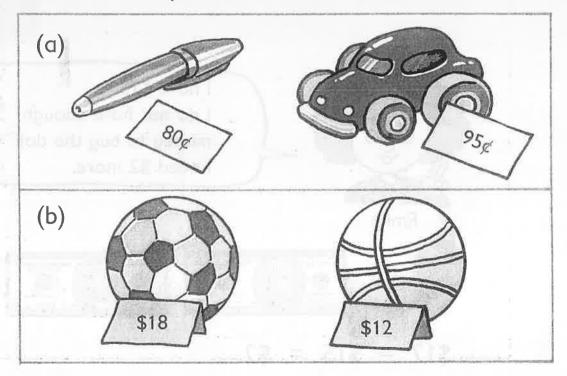
### 4. How much money is there in each set?



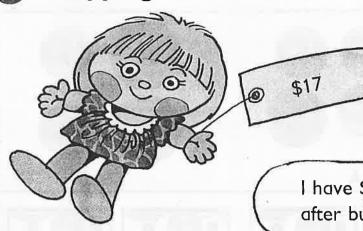
## 5. Which set has a bigger amount of money?



# 6. Which is cheaper?







I have \$20. I have \$3 left after buying the doll.









Dani



I have \$15.
I do not have enough money to buy the doll.
I need \$2 more.

**Emily** 





$$$17 - $15 = $2$$