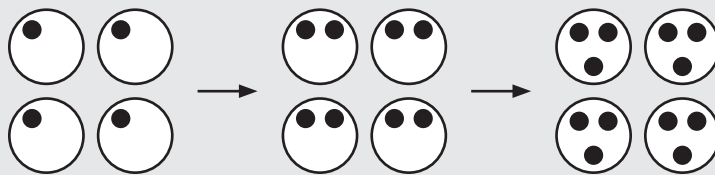


## NS3-48 Sharing When You Know the Number of Sets

Four friends want to share 12 cookies. They set out 4 plates.

They put 1 cookie on each plate, then repeat.



Each plate holds a **set** (or group) of 3 cookies.

When 12 cookies are **divided** (or shared equally) into 4 sets, there are 3 cookies **in each set**.

1. Put an equal number of cookies on each plate.

Hint: Draw the plates, then place 1 cookie at a time.

a) 6 cookies    3 plates



b) 9 cookies    3 plates

c) 8 cookies    2 plates

d) 5 plates    10 cookies

e) 2 plates    8 cookies

f) 4 plates    12 cookies

g) 4 plates    8 cookies

h) 2 plates    12 cookies

2. Draw dots for the things being shared equally. Draw circles for the sets.

a) 3 wagons

9 students

How many students in each wagon?

b) 15 stamps

3 pages

How many stamps on each page?

\_\_\_\_\_ students in each wagon

\_\_\_\_\_ stamps on each page

c) 4 boats

12 students

How many students on each boat?

d) 2 boxes

10 pens

How many pens in each box?

\_\_\_\_\_ students on each boat

\_\_\_\_\_ pens in each box

**3.** Draw a picture or make a model to solve the problem.

a) 4 friends share 8 tickets.

How many tickets does each friend get?

b) 12 chairs are placed in 3 rows.

How many chairs are in each row?

c) 24 flowers are planted in 6 rows.

How many flowers are in each row?

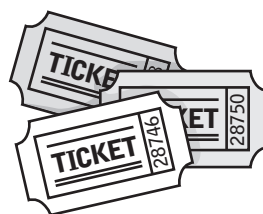
d) Edmond earned 20 dollars for his work. He worked 5 hours.

How much did he earn each hour?

Hint: Draw dots for dollars and circles for hours.

e) Kate earned 15 dollars for her work. She worked 3 hours.

How much did she earn each hour?



## NS3-49 Sharing When You Know the Number in Each Set

Ivan has 20 apples. He wants to put 5 apples in each bag.

To find out how many bags he needs, he starts by counting out 5 apples.



He then keeps counting out sets of 5 apples until he has used all 20 apples.



He can make 4 bags. When 20 apples are divided into sets of 5 apples, there are 4 sets.

1. Put the correct number of dots in each set.



2 dots in each set



3 dots in each set



2 dots in each set



3 dots in each set



5 dots in each set



3 dots in each set

2. Divide the array into the given number of sets.

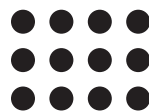
a) sets of 2



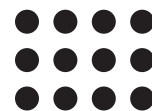
b) sets of 3



c) sets of 3



d) sets of 4



3. Draw a picture to solve the problem. Hint: Start by drawing a circle and placing the correct number of dots in the circle.

a) 12 dots

4 dots in each set

How many sets? \_\_\_\_\_

b) 15 dots

5 dots in each set

How many sets? \_\_\_\_\_

4. Draw dots for the things being divided equally.  
Draw circles for the sets.

a) 10 students

5 students in each wagon

How many wagons?

\_\_\_\_\_ wagons

b) 12 stamps

4 stamps on each page

How many pages?

\_\_\_\_\_ pages

c) 20 books

4 books on each shelf

How many shelves?

\_\_\_\_\_ shelves

d) 15 fish

5 fish in each tank

How many tanks?

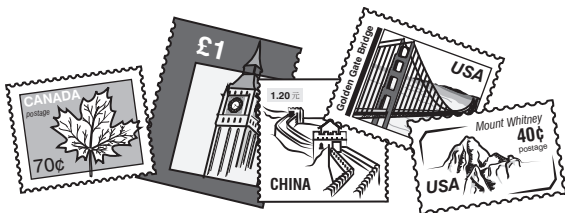
\_\_\_\_\_ tanks

5. Sam has 10 oranges. He wants to sell bags of 2 oranges. How many bags can he sell?

6. Emma has 12 books. She wants to put 3 books in each bag. How many bags does she need?

7. Raj has 15 stamps. He wants to put 5 stamps on each page of his stamp book. How many pages will he need?

8. A sailboat can hold 3 students. There are 12 students. How many sailboats are needed?



## NS3-50 Sets

12 students go canoeing.  
There are 4 canoes.  
A canoe holds 3 students.



What has been shared or divided into sets?

*Students.*

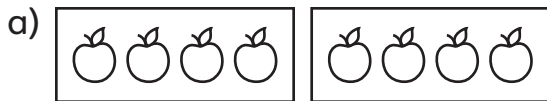
How many sets are there?

*There are 4 sets of students.*

How many are in each set?

*There are 3 students in each set.*

1. Fill in the blanks.



What has been shared or divided  
into sets? \_\_\_\_\_

How many sets? \_\_\_\_\_

How many in each set? \_\_\_\_\_



What has been shared or divided  
into sets? \_\_\_\_\_

How many sets? \_\_\_\_\_

How many in each set? \_\_\_\_\_

2. Draw a picture to show the situation. Use circles for sets and dots for items.





a) 3 sets      4 items in each set

b) 4 sets      5 items in each set

c) 2 groups      3 items in each group

d) 2 groups      4 items in each group

3. Fill in the table.

		What Has Been Shared or Divided into Sets?	How Many Sets?	How Many in Each Set?	
a)	15 students 3 students in each boat 5 boats		<i>students</i>	5	3
b)	5 friends 20 cookies 4 cookies for each friend				
c)	18 oranges 6 boxes 3 oranges in each box				
d)	4 dogs 20 spots 5 spots on each dog				
e)	5 stamps on each page 35 stamps 7 pages				
f)	3 playgrounds 12 swings 4 swings in each playground				
g)	5 people in each house 10 people 2 houses				
h)	20 chairs 5 rows 4 chairs in each row				

## NS3-51 Two Ways of Sharing

Iva has 12 cookies. There are two ways she can share or divide her cookies equally.

### Method 1:

She can decide how many sets.

Example: She wants to make 3 sets.  
She draws 3 circles.



She puts one cookie in each circle.



She continues until she uses all 12 cookies.



There are 4 cookies in each set.

### Method 2:

She can decide how many in each set.

Example: She puts 3 cookies in each set.



She counts out sets of 3 until she uses all 12 cookies.



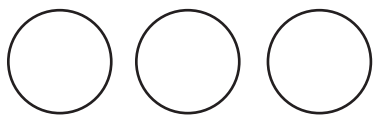
3      6      9      12

She makes 4 sets.

1. Share 12 dots equally. How many dots are in each set?

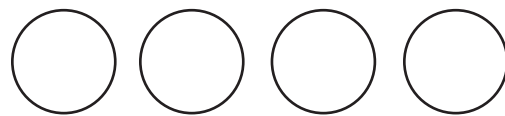
Place one dot at a time.

a) 3 sets



There are \_\_\_\_\_ dots in each set.

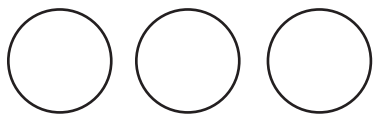
b) 4 sets



There are \_\_\_\_\_ dots in each set.

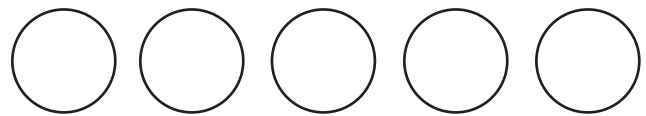
2. Share 15 dots equally. How many dots are in each set?

a) 3 sets



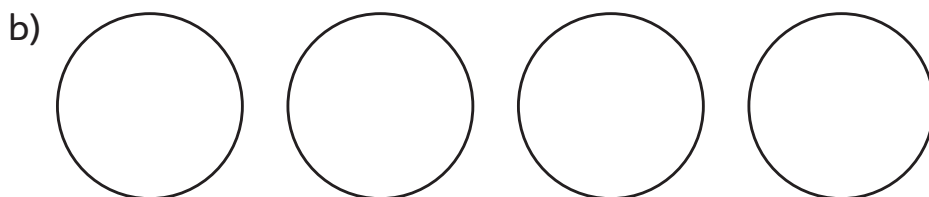
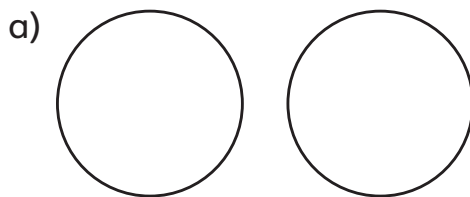
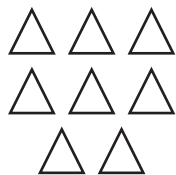
There are \_\_\_\_\_ dots in each set.

b) 5 sets

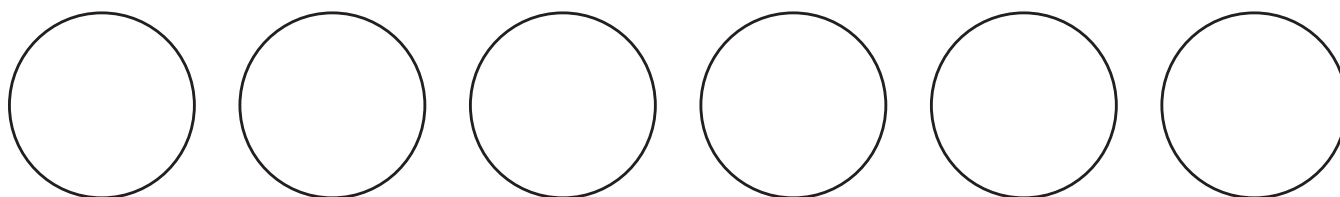
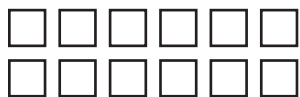


There are \_\_\_\_\_ dots in each set.

3. Share the triangles equally among the sets.  
Hint: Count the triangles first.



4. Share the squares equally among the sets.



5. Draw a picture to group 12 dots equally.

a) 3 dots in each set

b) 6 dots in each set

6. Show two ways you could put 10 apples in baskets.

a) Put 5 apples in each basket.

b) Put 2 apples in each basket.



## NS3-52 Two Ways of Sharing: Word Problems

I. Fill in what you know. Write a question mark for what you don't know.

	What Has Been Shared or Divided into Sets?	How Many Sets?	How Many in Each Set?
a) Jay has 15 stamps. He puts 5 stamps on each page of his book.	<i>stamps</i>	?	5
b) 20 campers go canoeing in 10 canoes.	<i>campers</i>	10	?
c) Don has 15 pens. He puts them into 3 boxes.			
d) 4 friends share 20 apples.			
e) Grace has 10 cookies. She puts 5 on each plate.			
f) 12 campers go sailing. There are 4 campers in each boat.			
g) 12 fruit bars are shared among 3 campers.			
h) 8 chairs are in 2 rows.			
i) There are 10 friends. 2 friends fit in a go-cart.			
j) There are 20 books on a bookshelf. Each shelf holds 5 books.			

2. Draw dots to show the answer.

a) 10 dots    5 sets

\_\_\_\_\_ dots in each set

c) 15 dots    5 dots in each set

\_\_\_\_\_ sets

e) 6 chairs in 2 rows

How many chairs are in  
each row? \_\_\_\_\_

g) 4 boys share 12 marbles.

How many marbles does each  
boy get? \_\_\_\_\_

i) 15 children go sailing in 3 boats.

How many children are in  
each boat? \_\_\_\_\_

b) 6 dots    3 dots in each set

\_\_\_\_\_ sets

d) 8 dots    4 sets

\_\_\_\_\_ dots in each set

f) Ron has 8 pencils.  
He puts 2 pencils in each box.

How many boxes does  
he use? \_\_\_\_\_

h) Sandy has 9 pears.  
She gives 3 pears to each friend.

How many friends receive  
pears? \_\_\_\_\_

j) Lewis has 16 stickers.  
He puts 4 on a page.

How many pages does  
he use? \_\_\_\_\_