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.

I. 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?
   c) 4 boats
      12 students
      How many students on each boat?
   d) 2 boxes
      10 pens
      How many pens in each box?

   _____ students in each wagon
   _____ stamps on each page
   _____ 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?
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.

I. Put the correct number of dots in each set.
   a) 2 dots in each set
   b) 3 dots in each set
   c) 2 dots in each set
   d) 3 dots in each set
   e) 5 dots in each set
   f) 3 dots in each set

II. 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

III. 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?
   b) 12 stamps
      4 stamps on each page
      How many pages?

   _____ wagons
   _____ pages

   c) 20 books
      4 books on each shelf
      How many shelves?
   d) 15 fish
      5 fish in each tank
      How many tanks?

   _____ shelves
   _____ 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?
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.
   a) [Diagram of 3 sets of apples]
   What has been shared or divided into sets? ________
   How many sets? _____
   How many in each set? _____
   b) [Diagram of 5 sets of stars]
   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.

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

![3 circles](image1)

She puts one cookie in each circle.

![3 circles with cookies](image2)

She continues until she uses all 12 cookies.

![3 circles with all cookies](image3)

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.

![3 cookies in each set](image4)

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

![Sets of 3](image5)

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

![3 sets of dots](image6)

There are ____ dots in each set.

b) 4 sets

![4 sets of dots](image7)

There are ____ dots in each set.

2. Share 15 dots equally. How many dots are in each set?
   a) 3 sets

![3 sets of dots](image8)

There are ____ dots in each set.

b) 5 sets

![5 sets of dots](image9)

There are ____ dots in each set.
3. Share the triangles equally among the sets.
   Hint: Count the triangles first.
   \[
   \begin{array}{c}
   \Delta \Delta \Delta \\
   \Delta \Delta \Delta \\
   \Delta \Delta \\
   \end{array}
   \quad a) \quad \begin{array}{c}
   \bigcirc \\
   \bigcirc
   \end{array}
   \quad b) \quad \begin{array}{c}
   \bigcirc \\
   \bigcirc \\
   \bigcirc \\
   \bigcirc
   \end{array}
   

4. Share the squares equally among the sets.
   \[
   \begin{array}{c}
   \square \square \square \square \square \\
   \square \square \square \square \square
   \end{array}
   \quad \begin{array}{c}
   \bigcirc \\
   \bigcirc \\
   \bigcirc \\
   \bigcirc \\
   \bigcirc
   \end{array}
   

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.
## Two Ways of Sharing: Word Problems

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

<table>
<thead>
<tr>
<th>What Has Been Shared or Divided into Sets?</th>
<th>How Many Sets?</th>
<th>How Many in Each Set?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Jay has 15 stamps. He puts 5 stamps on each page of his book.</td>
<td>stamps</td>
<td>?</td>
</tr>
<tr>
<td>b) 20 campers go canoeing in 10 canoes.</td>
<td>campers</td>
<td>10</td>
</tr>
<tr>
<td>c) Don has 15 pens. He puts them into 3 boxes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) 4 friends share 20 apples.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Grace has 10 cookies. She puts 5 on each plate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) 12 campers go sailing. There are 4 campers in each boat.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) 12 fruit bars are shared among 3 campers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h) 8 chairs are in 2 rows.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) There are 10 friends. 2 friends fit in a go-cart.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>j) There are 20 books on a bookshelf. Each shelf holds 5 books.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Draw dots to show the answer.
   a) 10 dots 5 sets
   b) 6 dots 3 dots in each set
   c) 15 dots 5 dots in each set
   d) 8 dots 4 sets
   e) 6 chairs in 2 rows
   f) Ron has 8 pencils. He puts 2 pencils in each box.

   How many chairs are in each row? _____
   How many boxes does he use? _____

   g) 4 boys share 12 marbles.
   h) Sandy has 9 pears. She gives 3 pears to each friend.

   How many marbles does each boy get? _____
   How many friends receive pears? _____

   i) 15 children go sailing in 3 boats.
   j) Lewis has 16 stickers. He puts 4 on a page.

   How many children are in each boat? _____
   How many pages does he use? _____