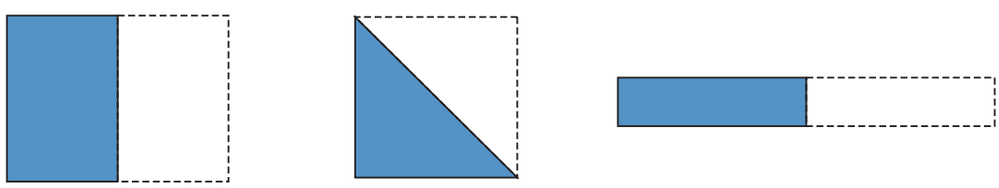
16 - 1 Describing the Size of Divided Parts

One Half

Instruction When something is divided into two equal parts, the size of one of the parts is called **one half**. It is written as the following:

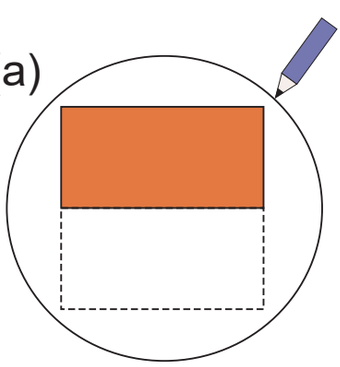
$\frac{1}{2}$ How to read: **one half**



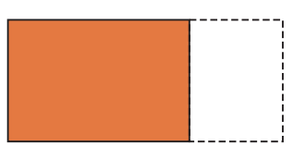
This kind of number is called a **fraction**.

Example Circle the following pictures that show an object divided into $\frac{1}{2}$ parts.

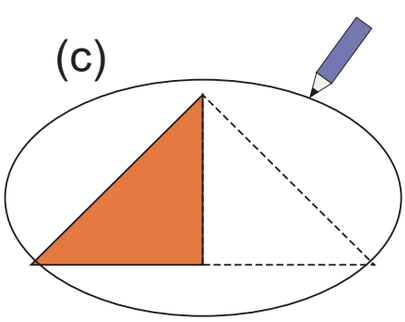
(a)



(b)



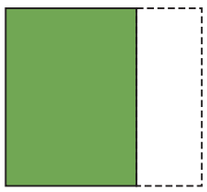
(c)



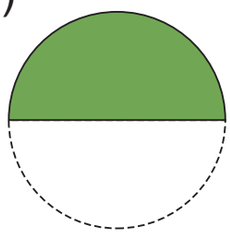
We should think about whether it is divided into two equal parts. The word of "equal" is very important.

1 Circle the following pictures that show an object divided into $\frac{1}{2}$ parts.

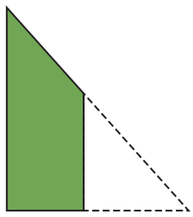
(a)



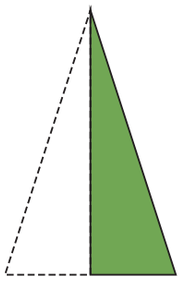
(b)



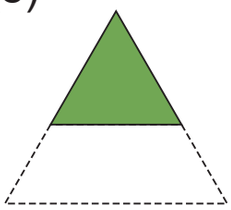
(c)



(d)

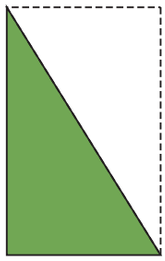


(e)

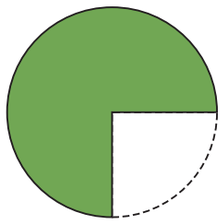


(f)

(g)

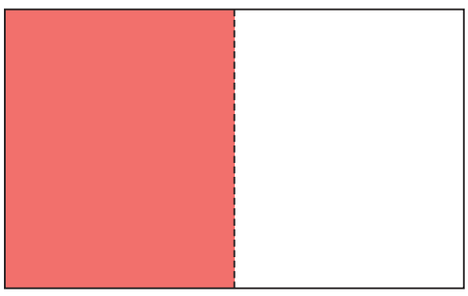


(h)

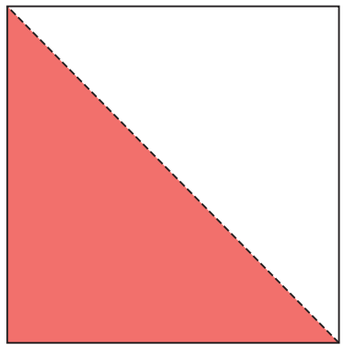


2 Colour a $\frac{1}{2}$ part of the shape in the following pictures.

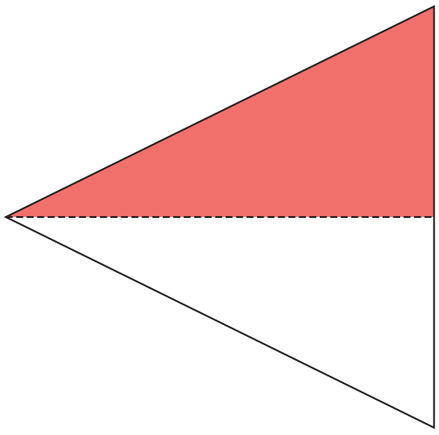
(a)



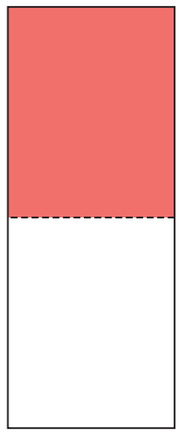
(b)



(c)



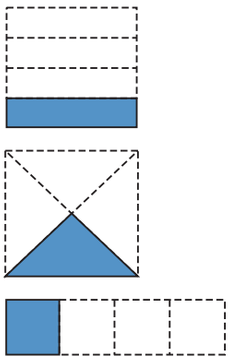
(d)



16 - 2 Describing the Size of Divided Parts

One Fourth

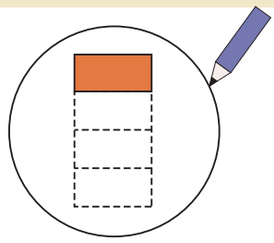
Instruction When something is divided into four equal parts, the size of one of the parts is called **one fourth**. It is written as the following:

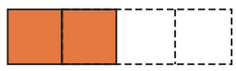


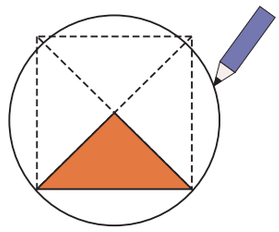
$\frac{1}{4}$ How to read: **one fourth**

This number is also called a **fraction**.

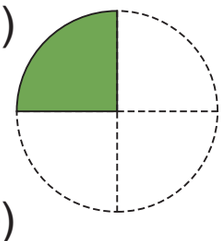
Example Circle the following pictures that show an object divided into $\frac{1}{4}$ parts.

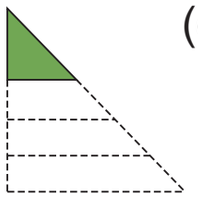
(a) 

(b) 

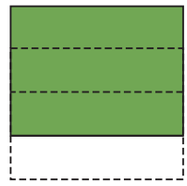
(c) 

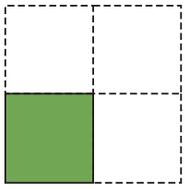
Circle the following pictures that show an object divided into $\frac{1}{4}$ parts.

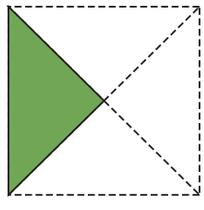
(a) 

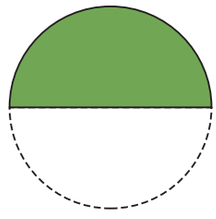
(b) 

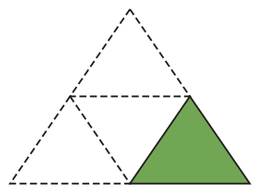
(c) 

(d) 

(e) 

(f) 

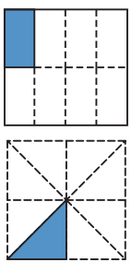
(g) 

(h) 

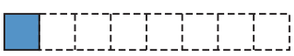
16 - 3 Describing the Size of Divided Parts

One Eighth

Instruction When something is divided into eight equal parts, the size of one of the parts is called **one eighth**. It is written as the following:

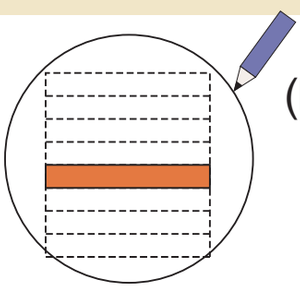


$\frac{1}{8}$ How to read: **one eighth**.

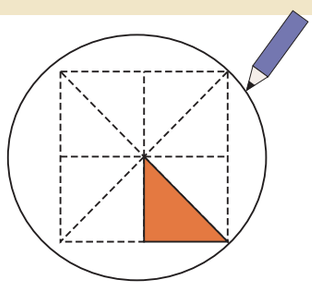


This number is also called a **fraction**.

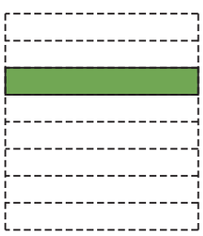
Example Circle the following pictures that show an object divided into $\frac{1}{8}$ parts.

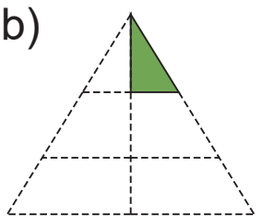
(a) 

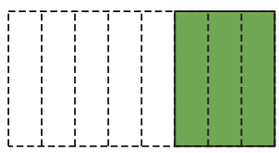
(b) 

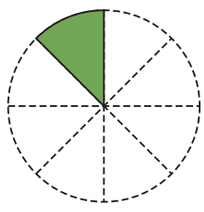
(c) 

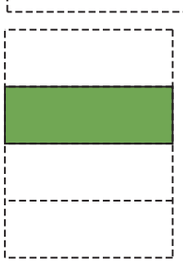
Circle the following pictures that show an object divided into $\frac{1}{8}$ parts.

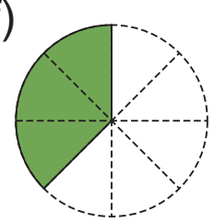
(a) 

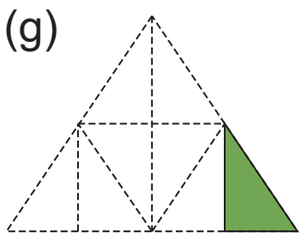
(b) 

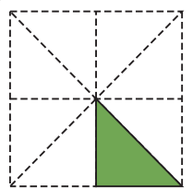
(c) 

(d) 

(e) 

(f) 

(g) 

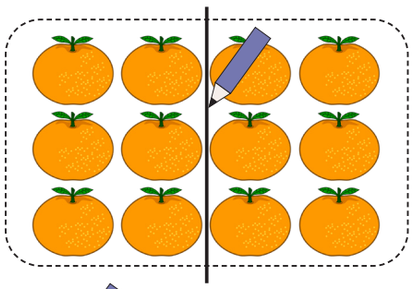
(h) 

16 - 4 Describing the Size of Divided Parts

Original Size and Fractions

Example 1 There are 12 oranges. Answer the following questions.

1 Draw a line to divide 12 oranges into two equal parts.



2 How many oranges are there in one $\frac{1}{2}$ part?

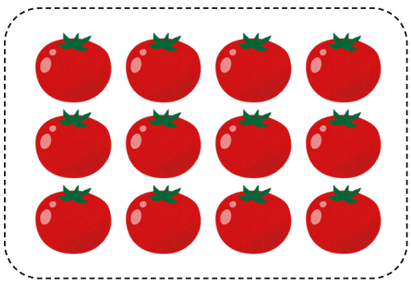
6 oranges

3 What happens if you multiply the answer of 2 by 2?

Multiplying 6 by 2 equals 12, which is the original number of oranges.

1 There are 12 tomatoes. Answer the following questions.

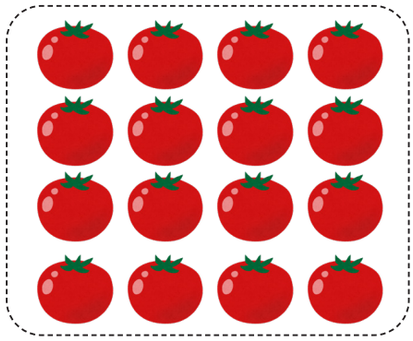
1 Draw lines to divide 12 tomatoes into four equal parts



2 How many tomatoes are there in one $\frac{1}{4}$ part? ☐ tomatoes

3 What happens if you multiply the answer to Problem 2 by 4?

2 There are 16 tomatoes. Answer the following questions.



1 Draw lines to divide 16 tomatoes into four equal parts.

2 How many tomatoes are there in one $\frac{1}{4}$ part? ☐ tomatoes

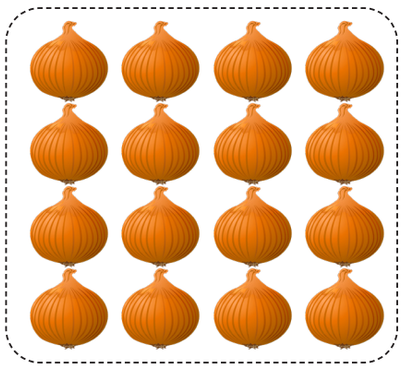
3 Why are the number of tomatoes in one $\frac{1}{4}$ part in Problem 1 and Problem 2 different?

This is a very important point!

3 There are 16 onions. Answer the following questions.

Can you divide this into equal eight parts?

1 Draw lines to divide 16 onions into eight equal parts.



2 How many onions are there in one $\frac{1}{8}$ part? ☐ onions

3 What happens if you multiply the answer to Problem 2 by 8?

16 - 5 Describing the Size of Divided Parts

Review

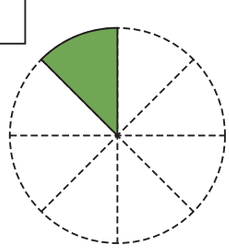
1 Write the numbers in the □.

1. When something is divided into two equal parts, the size of one of the parts is called one half and is written as □.
2. When something is divided into eight equal parts, the size of one of the parts is called one eighth and is written as □.
3. When something is divided into four equal parts, the size of one of the parts is called one fourth and is written as □.

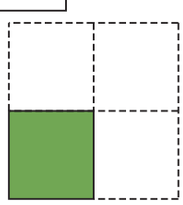
2 How big is the coloured parts compared to the original shape? Choose from $\frac{1}{2}$, $\frac{1}{4}$, or $\frac{1}{8}$.

1. □

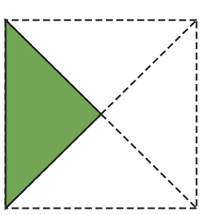
2. □



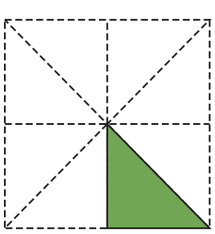
3. □



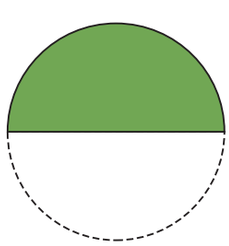
4. □



5. □

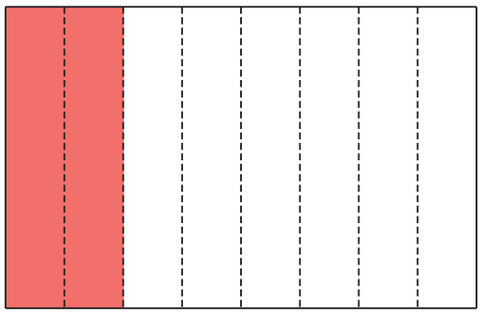


6. □

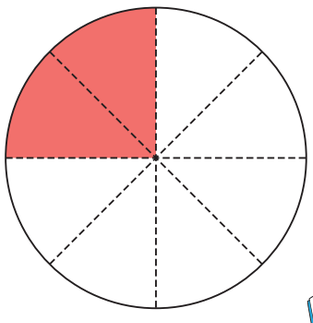


3 Colour a $\frac{1}{4}$ part of the shape in the following pictures.

(a)



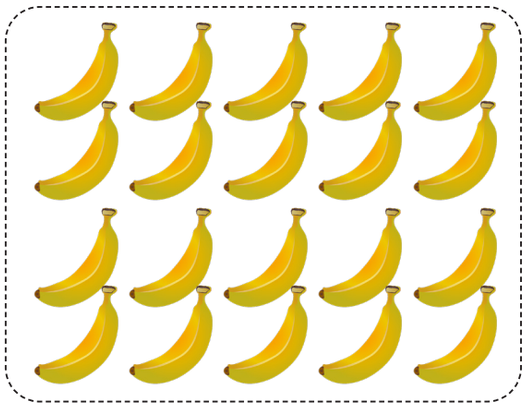
(b)



There are many lines. Do not be confused! Think about dividing the shape into four equal parts. Which lines are important?

4 There are 20 bananas. Answer the following questions.

1 Draw a line to divide 20 bananas into two equal parts.



2 How many bananas are there in one $\frac{1}{2}$ part?

☐ bananas

3 What happens if you multiply the answer to Problem **2** by 2?