



3rd  
Basic

4th  
Advanced

# Helping With Math

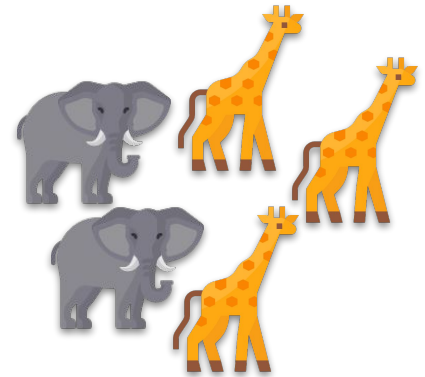
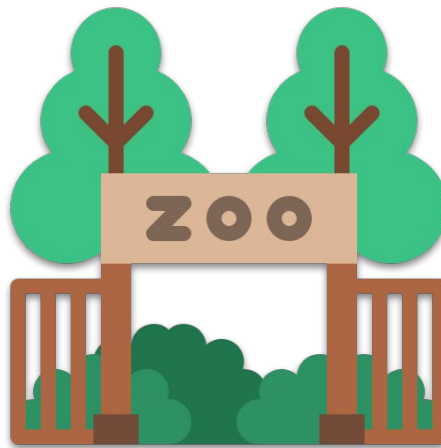
USA  
GRADES

## Basic Concepts of Fractions

Suitable for students  
aged 7-9



This pack is suitable for learners aged 7-9 years old or 3rd and 4th graders (USA). The content covers fact files and relevant basic and advanced activities involving basic concepts of fractions.



Look at the animals, what fraction of the animals are elephants? To answer that, let's study fractions.

What is Fraction?

- A **fraction** is a numerical quantity that represents equal parts of a whole. It is also considered as a ratio of two integers



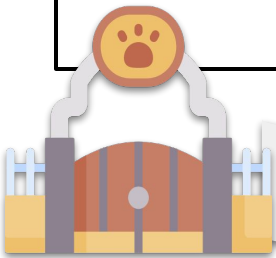
## PARTS OF A FRACTION

# PARTS OF A FRACTION

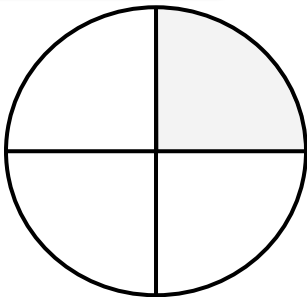
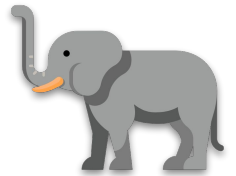
$\frac{1}{5}$  → numerator

5 → denominator

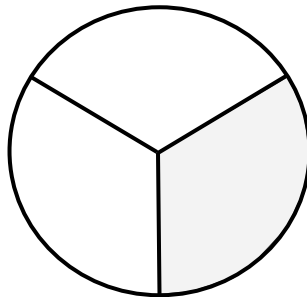
- NUMERATOR - it is a number located at the top of a common fraction that indicates the number of equal parts taken.
- DENOMINATOR - It is a number at the bottom of a common fraction that shows the number of equal parts in a whole.



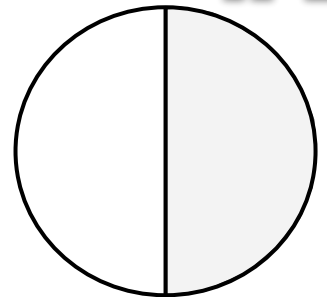
## FRACTIONS WITH ILLUSTRATIONS



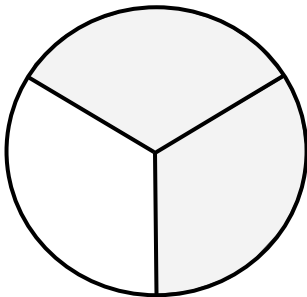
$\frac{1}{4}$



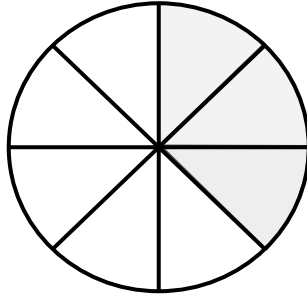
$\frac{1}{3}$



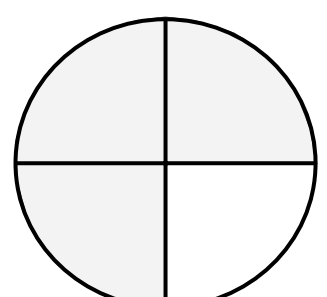
$\frac{1}{2}$



$\frac{2}{3}$



$\frac{3}{8}$



$\frac{3}{4}$



# TYPES OF FRACTION

## TYPES OF FRACTION

### PROPER FRACTION



It is a fraction whose numerator is smaller than the denominator.

$$\frac{2}{3}$$

→ numerator  
→ denominator



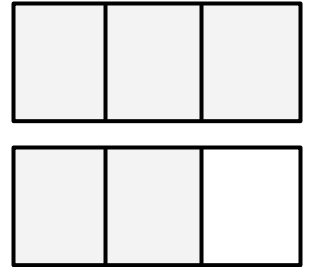
### IMPROPER FRACTION



It is a fraction whose numerator is larger than or equal to the denominator.

$$\frac{5}{2}$$

→ numerator  
→ denominator



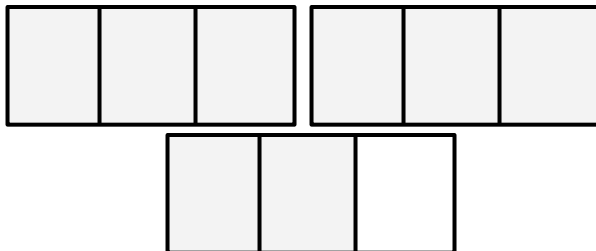
### MIXED NUMBER



It is a number written as a whole number with a proper fraction.

$$2\frac{1}{2}$$

← whole number      → numerator  
   → denominator



## LET'S PRACTICE!

Determine the fraction of the shaded part below.  
Write your answers on the space provided.

1.)

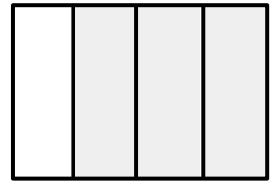
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2.)

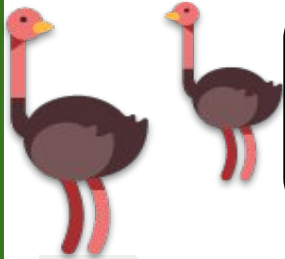
  

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3.)

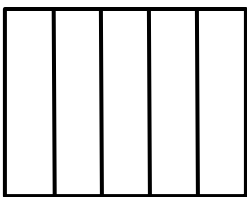
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Illustrate the given fractions below by shading the figures below.

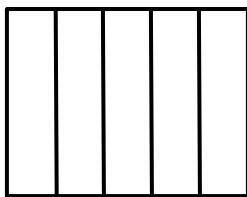
4.)

$$\frac{1}{5}$$



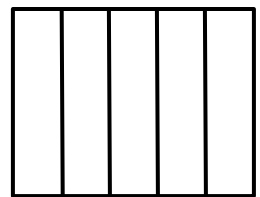
5.)

$$\frac{2}{5}$$



6.)

$$\frac{3}{5}$$



# TABLE OF ACTIVITIES

| <b>Ages 7-8 (Basic)</b>    |                             | <u>3rd Grade</u> |
|----------------------------|-----------------------------|------------------|
| 1                          | Let the Parrot Decides      |                  |
| 2                          | Mother and Baby Animals     |                  |
| 3                          | Long Neck Giraffes          |                  |
| 4                          | Let's Go to the Zoo         |                  |
| 5                          | Let's Find Some Crocodiles  |                  |
| <b>Ages 8-9 (Advanced)</b> |                             | <u>4th Grade</u> |
| 6                          | What Animal Do You Like?    |                  |
| 7                          | How Many Animals Were Left? |                  |
| 8                          | Extinct Animals             |                  |
| 9                          | Fish Feeding                |                  |
| 10                         | Zoo Keepers                 |                  |



# LET THE PARROT DECIDES

G3

Basic

Let's hear what the parrot would say if you ask him a question. Read the following statements and determine whether it is true or false. Write "true" if the statement is true, otherwise, write "false".

1. A fraction is a numerical quantity that represents equal parts of a whole. It is also considered as a ratio of two integers

2.) Mixed number is a number written as a whole number with an improper fraction.

3.) Proper fraction is a fraction whose numerator is smaller than the denominator.

4.) Improper fraction is a fraction whose numerator is larger than or equal to the denominator.

5.)  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{1}{3}$  and  $\frac{3}{4}$  are examples of proper fraction.



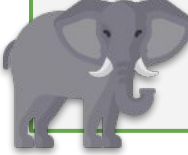
# MOTHER AND BABY ANIMALS

G3  
Basic


Let's help mother animals find their babies by drawing a line from one column to another. Identify what is being stated by connecting the dots below.

1.) It is a number located at the top of a common fraction that indicates the number of equal parts taken.

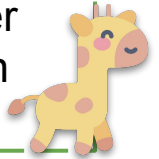
2.) It is a numerical quantity that represents equal parts of a whole.

3.)   $\frac{1}{3}$  is an example of \_\_\_\_\_.

4.) It is a number at the bottom of a common fraction that shows the number of equal parts in a whole.

5.)   $\frac{4}{3}$  is an example of \_\_\_\_\_.

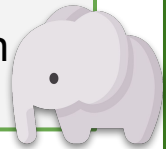
a.) Improper Fraction



b.) Denominator

c.) Numerator

d.) Proper Fraction



e.) Fraction



# LONG NECK GIRAFFES

G3

Basic

To see long neck giraffes, answer the following questions by writing the fraction described in the statement.

1

What is 4 as a fraction of 7?

2

What is 2 as a fraction of 5?

3

What is 3 as a fraction of 4?

4

What is 8 as a fraction of 9?

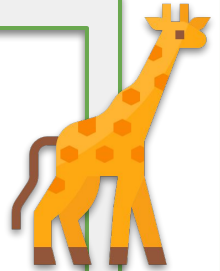
5

What is 3 as a fraction of 7?

6

What is 7 as a fraction of 9?



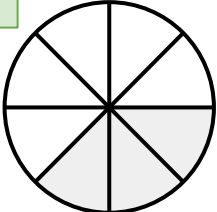
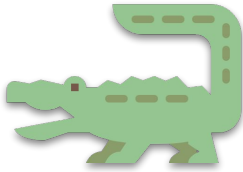
# LET'S GO TO THE ZOO

G3

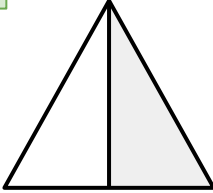
Basic

Yay! It's zoo adventure day! To reach the zoo, determine the fraction of the shaded part, fill in the missing number to complete the fraction. Write your answers inside the box.

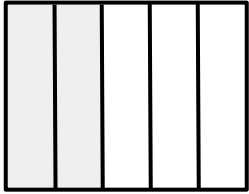
1.)


$$\frac{\square}{8}$$


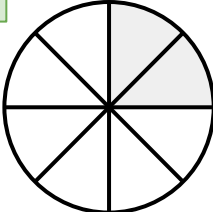
2.)


$$\frac{1}{\square}$$

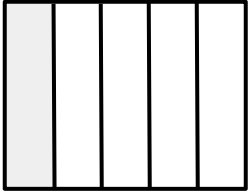
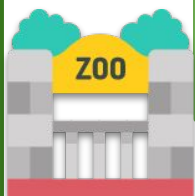
3.)


$$\frac{\square}{5}$$


4.)


$$\frac{2}{\square}$$

5.)


$$\frac{1}{\square}$$


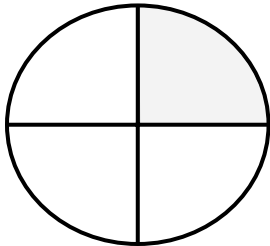
# LET'S FIND SOME CROCODILES

G3

Basic

The crocodile area is hard to find inside the zoo. Help me find them. Determine the fraction of the shaded part below. Encircle your answer.

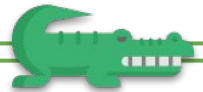
1.)



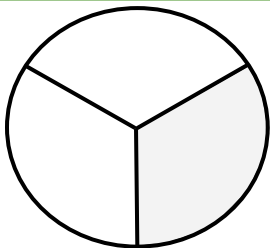
$$\frac{1}{4}$$

$$\frac{2}{3}$$

$$\frac{1}{3}$$



2.)

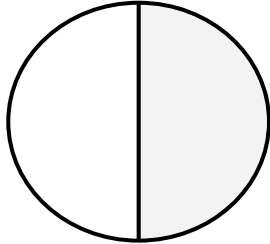


$$\frac{2}{3}$$

$$\frac{1}{3}$$

$$\frac{1}{4}$$

3.)



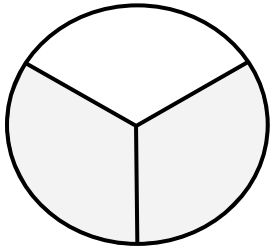
$$\frac{2}{3}$$

$$\frac{1}{2}$$

$$\frac{1}{3}$$



4.)

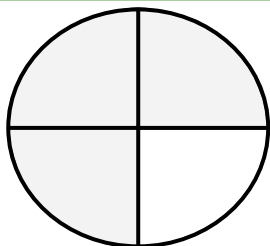


$$\frac{2}{3}$$

$$\frac{1}{3}$$

$$\frac{1}{4}$$

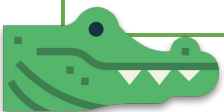
5.)



$$\frac{2}{3}$$

$$\frac{1}{4}$$

$$\frac{3}{4}$$



# WHAT ANIMAL DO YOU LIKE?

G4  
Advanced

All of us have our favorite animal. Can you tell me what's your favorite? Determine the fraction representation of the following fraction names. Write the letter of the correct answer below.

1.)

one-half

2.)

one-third

3.)

one-fourth

4.)

one-sixth

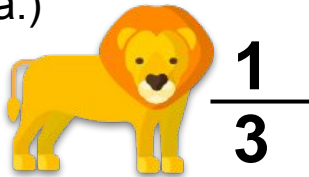
5.)

two-thirds

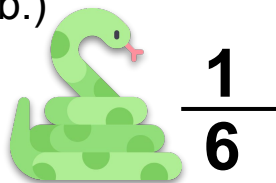
6.)

three-fourths

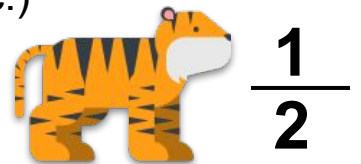
a.)



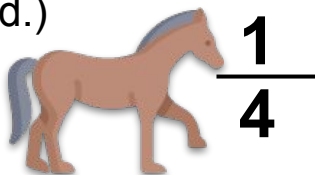
b.)



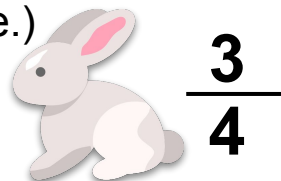
c.)



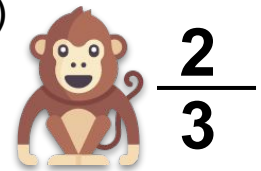
d.)



e.)



f.)

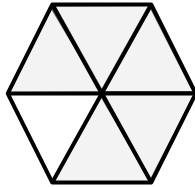
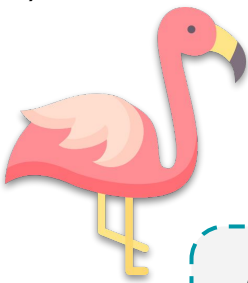


# HOW MANY ANIMALS WERE LEFT?

G4  
Advanced

To determine the fraction of the following animals in the zoo, identify the fraction of the shaded part below. Encircle your answer.

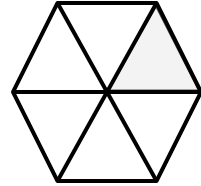
1.)



$$\frac{5}{6}$$

$$\frac{1}{6}$$

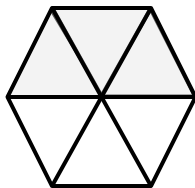
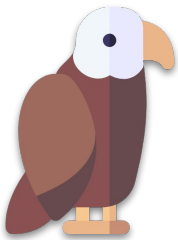
2.)



$$\frac{4}{6}$$

$$\frac{1}{6}$$

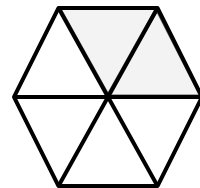
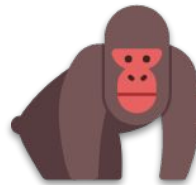
3.)



$$\frac{3}{6}$$

$$\frac{4}{6}$$

1.)



$$\frac{2}{6}$$

$$\frac{5}{6}$$

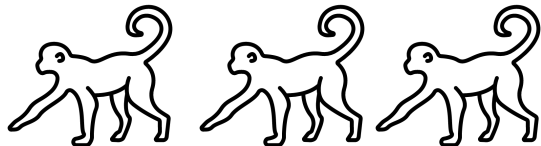


# EXTINCT ANIMALS

G4  
Advanced

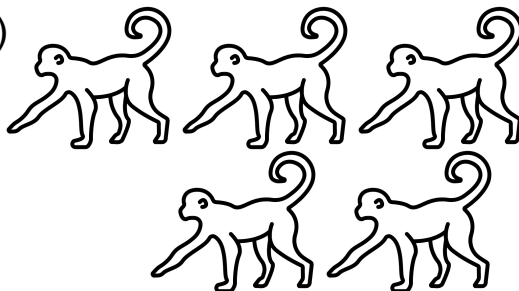
These are extinct animals in HWM Zoo. To know what fraction of animals are still alive, shade them according to the statements below.

1.)



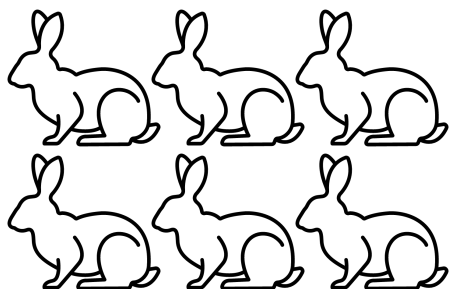
Shade 2 out of 3 monkeys

2.)



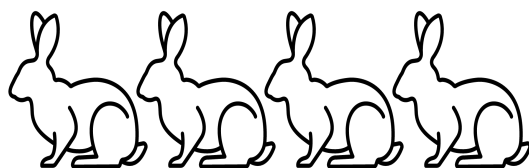
Shade 3 out of 5 monkeys

3.)



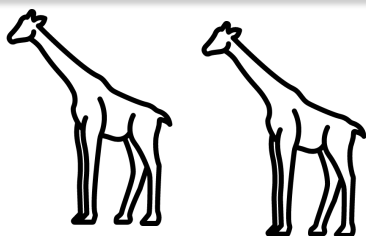
Shade 5 out of 6 rabbits

4.)



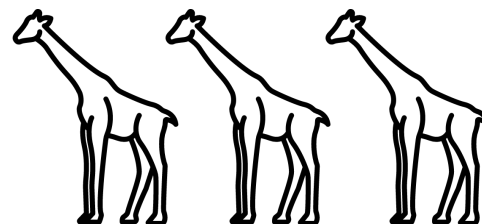
Shade 2 out of 4 rabbits

5.)



Shade 1 out of 2 giraffes

6.)



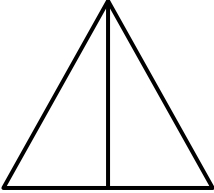

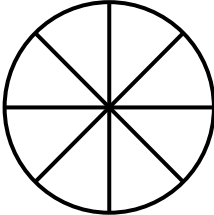
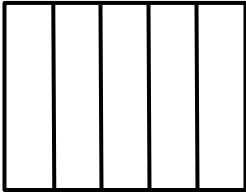

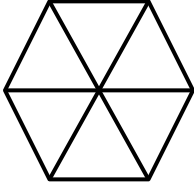
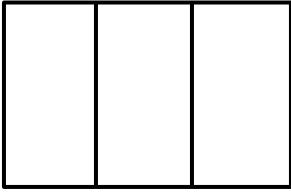
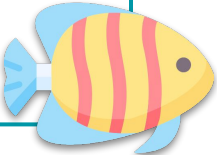
Shade 2 out of 3 giraffes



# FISH FEEDING

G4  
Advanced

There will be a free fish feeding activity. To join the activity, illustrate the stated fractions below and write their fraction name on the space provided.

| Fraction          | Illustration  | Fraction Name   |
|-------------------|---|---|
| 1.) $\frac{1}{2}$ |    |    |
| 2.) $\frac{1}{8}$ |   |   |
| 3.) $\frac{1}{5}$ |  |  |
| 4.) $\frac{1}{6}$ |  |   |
| 5.) $\frac{1}{3}$ |  |  |

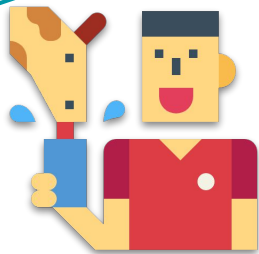


# ZOO KEEPERS

G4  
Advanced

Let's meet the zoo keepers. Read the following statements and answer what is asked. Write your answers on the space provided.

There are 8 giraffes, 7 tigers, 11 elephants and 3 lions in a zoo. Determine the fraction of each kind of animal in the zoo.



1 giraffes

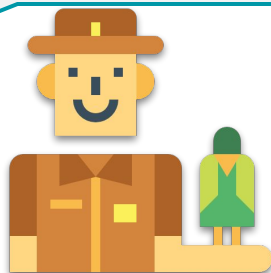
2 elephants

3 tigers

4 lions

|  |
|--|
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

In a zoo, there are 5 red parrots, 6 white parrots, 3 green parrots, and 7 orange parrots. Determine the fraction of each color of parrot in the zoo.



5 red

6 green

7 white

8 orange

|  |
|--|
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |



# ANSWER GUIDE

## Activity 1

1.) True    2.) False    3.) True    4.) True    5.) True

## Activity 2

1.) c    2.) e    3.) d    4.) b    5.) a

## Activity 3

1.)  $\frac{4}{7}$     2.)  $\frac{2}{5}$     3.)  $\frac{3}{4}$     4.)  $\frac{8}{9}$     5.)  $\frac{3}{7}$     6.)  $\frac{7}{9}$

## Activity 4

1.) 3    2.) 2    3.) 2    4.) 8    5.) 5

## Activity 5

1.)  $\frac{1}{4}$     2.)  $\frac{1}{3}$     3.)  $\frac{1}{2}$     4.)  $\frac{2}{3}$     5.)  $\frac{3}{4}$

## Activity 6

1.) c    2.) a    3.) d    4.) b    5.) f    6.) e



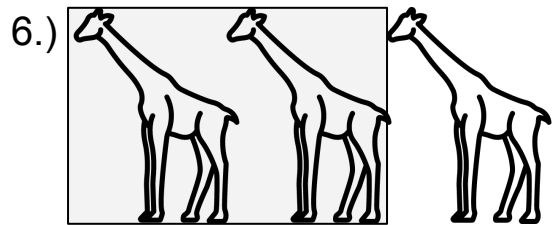
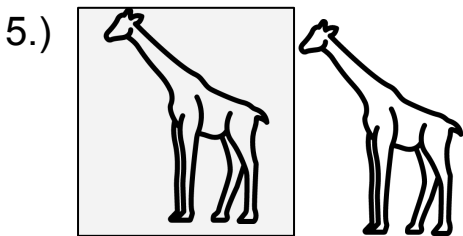
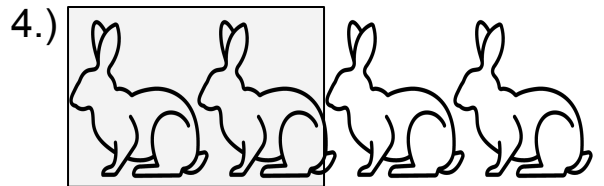
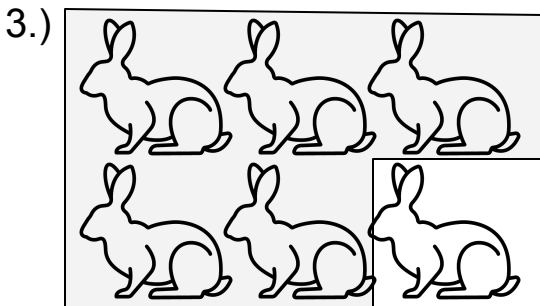
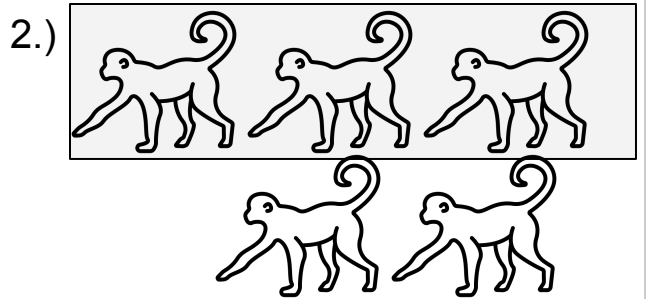
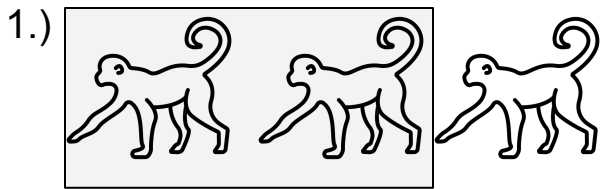


# ANSWER GUIDE

## Activity 7

1.)  $\frac{5}{6}$     2.)  $\frac{1}{6}$     3.)  $\frac{3}{6}$     4.)  $\frac{2}{6}$

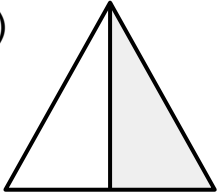
## Activity 8



# ANSWER GUIDE

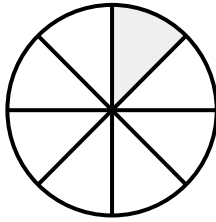
## Activity 9

1.)



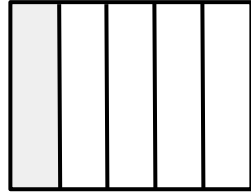
one-half

2.)



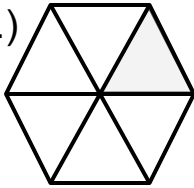
one-eighth

3.)



one-fifth

4.)



one-sixth

5.)



one-third

## Activity 10

1.)  $\frac{8}{29}$

2.)  $\frac{11}{29}$

3.)  $\frac{7}{29}$

4.)  $\frac{3}{29}$

5.)  $\frac{5}{21}$

6.)  $\frac{3}{21}$

7.)  $\frac{6}{21}$

8.)  $\frac{7}{21}$



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