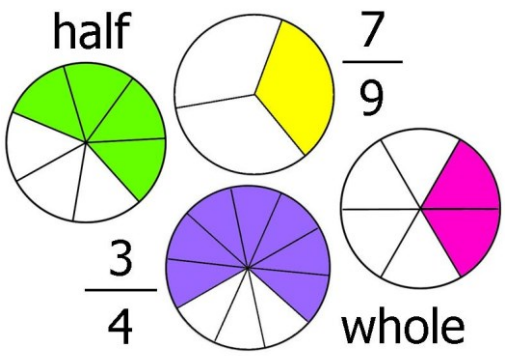
Math

Application Guide



1. Which of the following numbers are divisors of 114?:

a. 2
b. 3
c. 4
d. 5
e. 6

Write divisibility criteria you have been using:

2. Complete the following tables

Dividers of 40	
Dividers of 24	
Common dividers of 40 and 24	
Greatest common divisor	

Dividers of 20	
Dividers of 16	
Common dividers of 20 and 16	
Greatest common divisor	

8. Find Greatest Common Divisors (GCD) for the given numbers.

16	40	
2	5	

GCD (16, 40) =

30	45	
10	15	

GCD (30, 45) =

12	16	20	
6	8	10	

GCD (12, 16, 20) =

32	40	

GCD (32,40) =

9. Read propositions and define whether they a true (T) or false (F)..

a. 51 is a prime number ( )
b. All prime numbers are odd ( )
c. The prime factors of 30 are 2, 3 and 5 ( )
d. 63 is a multiple of 9 ( )
e. A prime number has only the 1 as a factor ( )
f. 7 is divisor of 61 ( )

James wants to buy the same number of sausages and buns to sell hot dogs. The sausages come in packs of 8 and buns in packages of 10. Calculate the minimal number of packages of both kinds he has to buy.

Points earned by Jesse in contest are the least common divisor of numbers 24, 12 and 16. How many points she got?

Each number in the left column is a divisor of the number in the right column. Find and write down **all possible pairs** of numbers.

11	16
3	28
7	53
8	55
10	50
	6

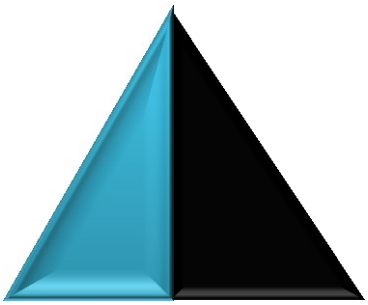
11.

a. How many equal parts contains the triangle?

How many parts are black?

What part of triangle is black?

Write the fraction that represents the "half "

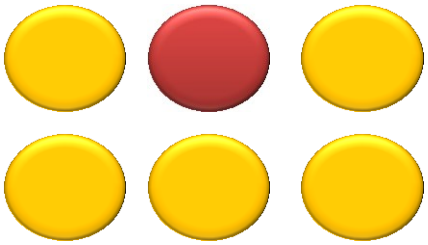


b. How many circles are red?

How many circles are there altogether?

What part of the circles are red?

What represents fraction one-sixth? $\frac{1}{6}$



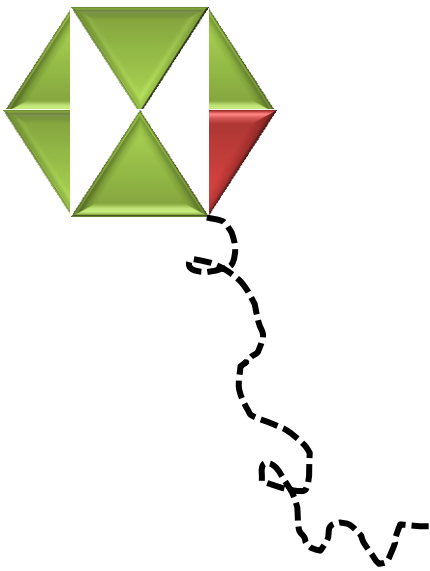
c. How many is equal sections has a kite?

How many sections are red?

What fraction represents the red section of kite?

What represents number 7 in the fraction?

What represents number 1 in the fraction?



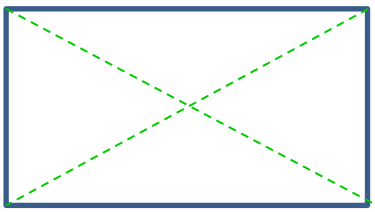
12. A fraction representing a twelfth part is written $\frac{1}{12}$

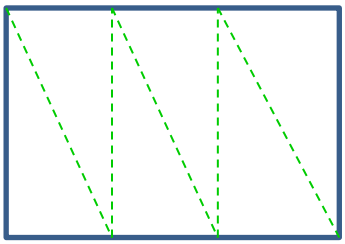
Write how to represent 'tenth', 'ninth', 'thirteenth', 'seventh', 'fourteenth', 'one-twentieth'.

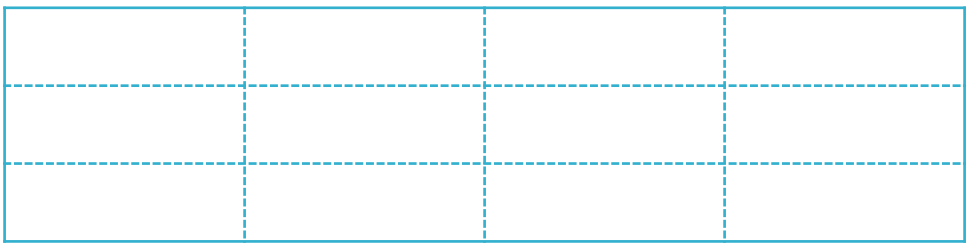
13. The fraction $\frac{1}{15}$ reads ' One Fifteenth'. Write how it reads:

$\frac{1}{15}$		$\frac{1}{13}$	
$\frac{1}{16}$		$\frac{1}{9}$	
$\frac{1}{12}$		$\frac{1}{6}$	
$\frac{1}{20}$		$\frac{1}{17}$	

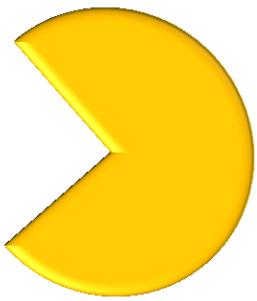
14. Copy the figure in your notebook and color the part indicated by fraction.

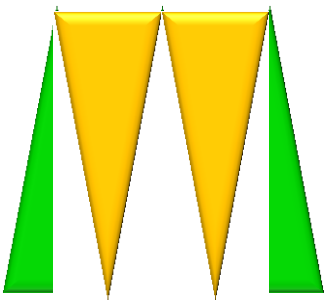
$\frac{1}{2}$ 

$\frac{1}{3}$ 

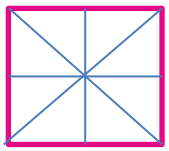
$\frac{1}{4}$ 

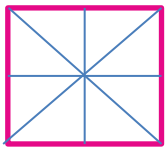
15. Write the fraction that expresses the part of the figure which is in

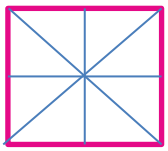


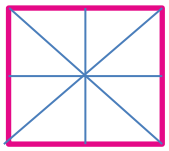


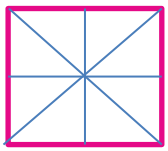
16. Color the part of the square indicated by fraction:

 $\frac{1}{4}$

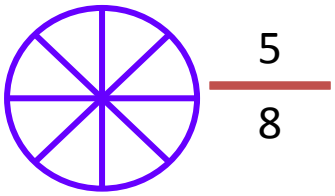
 $\frac{1}{2}$

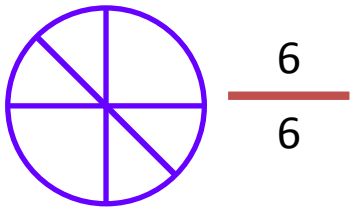
 $\frac{3}{4}$

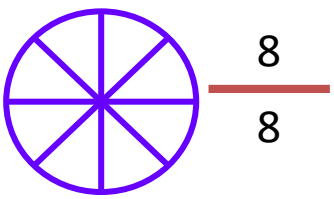
 $\frac{1}{8}$

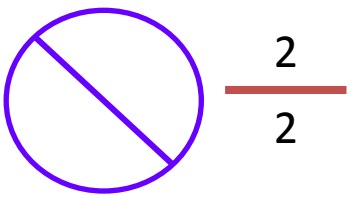
 $\frac{3}{8}$

In each exercise analyse the meaning of the picture and indicate which pictures represent fractions correctly. Give an explanation.

 $\frac{5}{8}$

 $\frac{6}{6}$

 $\frac{8}{8}$

 $\frac{2}{2}$

17 . Answer the questions.

a. Are the fractions equivalent?

$\frac{7}{5}$ and $\frac{14}{15}$ $\qquad$ $\frac{3}{5}$ and $\frac{9}{25}$

$\frac{2}{5}$ and $\frac{4}{10}$ $\qquad$ $\frac{2}{7}$ and $\frac{5}{7}$

b. Fractions $\frac{3}{8} = \frac{\quad}{40}$ are equal if the numerator is equal to

1. 15
2. 35
3. 9
4. 8

b. Simplification of $\frac{3}{8}$ gives :

$\frac{9}{6}$ $\qquad$ $\frac{3}{8}$ $\qquad$ $\frac{9}{8}$ $\qquad$ $\frac{3}{6}$

c. The fraction smaller than 1 is:

$\frac{9}{9}$ $\qquad$ $\frac{8}{9}$ $\qquad$ $\frac{9}{8}$ $\qquad$ $\frac{3}{1}$

d. The fraction greater than $\frac{5}{8}$ is:

$\frac{3}{7}$ $\frac{4}{15}$ $\frac{6}{11}$ $\frac{7}{9}$

e. The correct proposition is:

$\frac{3}{7} < \frac{1}{3}$ $\frac{2}{5} = \frac{5}{2}$ $\frac{2}{3} > \frac{1}{4}$

$\frac{1}{4} > \frac{2}{3}$

f. The common denominator for $\frac{3}{4}$, $\frac{1}{2}$, $\frac{4}{5}$ is:

a. 8
b. 10
c. 20
d. 12
e. 54

g. Rosa bought $\frac{3}{2}$ pounds of chicken, $\frac{4}{5}$ of a pound of turkey, $\frac{1}{2}$ of a pound of fish and $\frac{3}{4}$ of a pound of veal. The smallest amount is meat has a: a) Fish; b) Chicken; c) Turkey; d) Veal.

h. Write the missing enumerator to get equivalent fraction.

$\frac{3}{5} = \frac{\quad}{20}$

The denominator 5 multiplied by 4 gives 20, so we have to multiply the numerator 3 by 4 also. It gives 12 = 3 x 4.

$\frac{7}{8} = \frac{\quad}{40}$ $\quad \frac{3}{4} = \frac{\quad}{24}$ $\quad \frac{5}{9} = \frac{\quad}{27}$

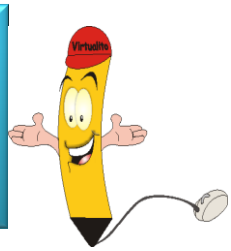
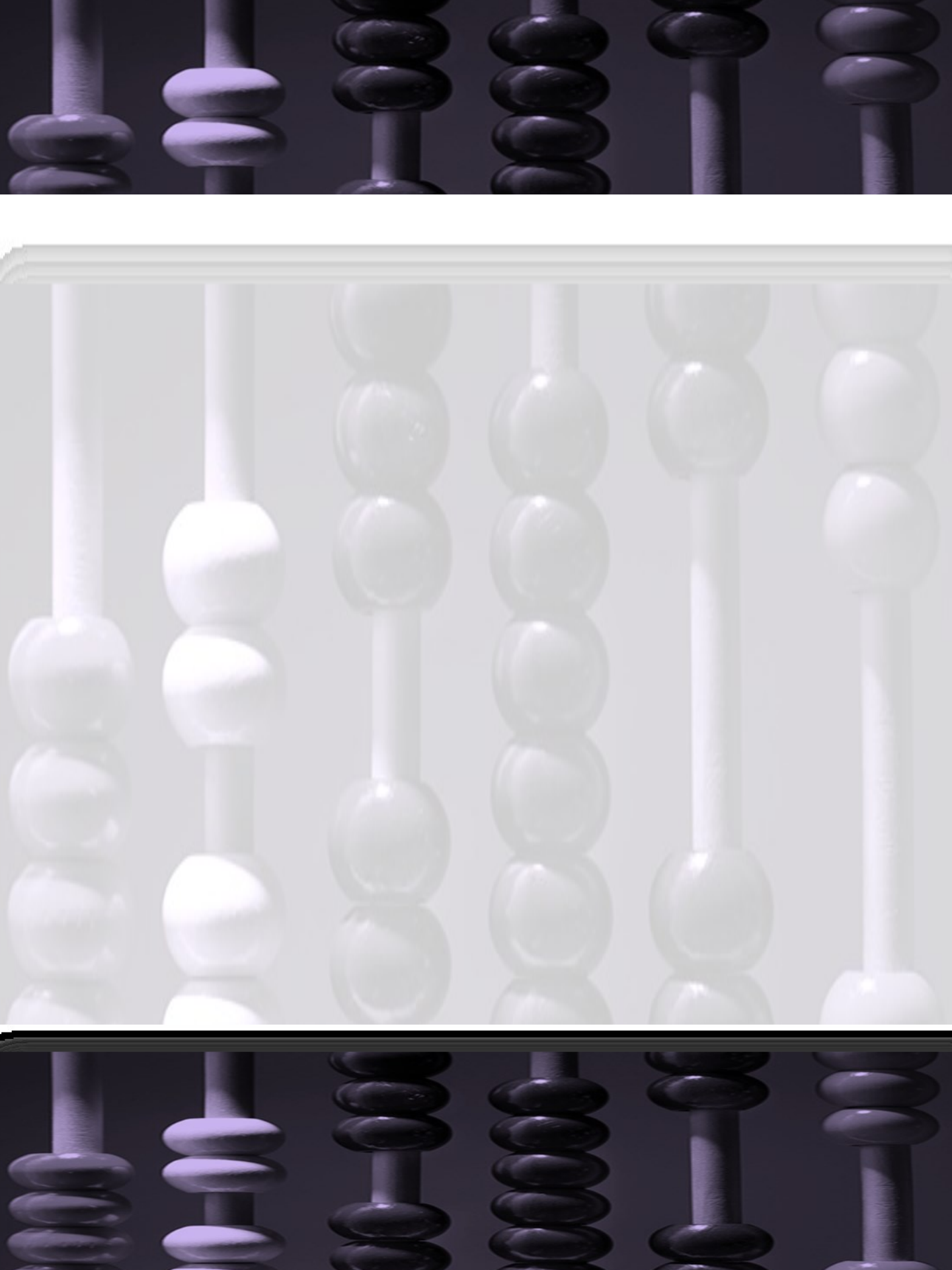
$\frac{1}{9} = \frac{\quad}{36}$ $\quad \frac{3}{8} = \frac{\quad}{16}$ $\quad \frac{3}{8} = \frac{\quad}{24}$

$\frac{5}{9} = \frac{\quad}{45}$ $\quad \frac{8}{10} = \frac{\quad}{80}$ $\quad \frac{5}{6} = \frac{\quad}{42}$

i. Simplify fractions if possible:

$\frac{6}{10}$ $\quad \frac{9}{12}$ $\quad \frac{8}{24}$ $\quad \frac{5}{15}$ $\quad \frac{12}{30}$ $\quad \frac{4}{20}$ $\quad \frac{20}{25}$ $\quad \frac{14}{49}$

Congratulations!

You have been finished the unit three of mathematics.

Do not forget to send the guide and activities by email.