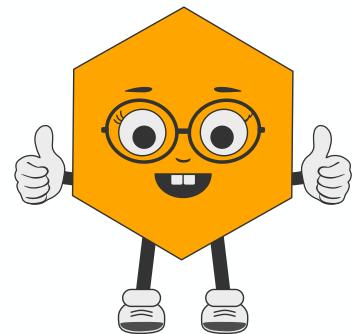# virtual au pair

GR.5 Maths ATP term3

- fractions
- 2D & 3D
- length

question 1 : fractions

1.1)   Label each of the following types of fractions.

a) $\frac{3}{8}$: _____   b) $\frac{6}{2}$: _____

c) $3\frac{1}{4}$: _____

1.2)   Give two equivalent fractions for each of the following.

a) $\frac{3}{8}$: _____   b) $\frac{3}{4}$: _____

c) $\frac{1}{6}$: _____   d) $\frac{2}{3}$: _____

1.3)   Complete the equivalent fractions.

a) $\frac{2}{8} = \frac{}{4}$ b) $\frac{15}{20} = \frac{3}{\_\_}$ c) $\frac{}{18} = \frac{2}{9}$ d) $\frac{25}{75} = \frac{1}{\_\_}$

1.4)   Count in $\frac{1}{6}$'s from 4 to 6.

_____

_____

1.5)   Compare the fractions by using in the correct sign : < ; > of =

a) $\frac{4}{16}$ _____ $\frac{3}{15}$ b) $\frac{2}{7}$ _____ $\frac{3}{8}$ c) $\frac{5}{9}$ _____ $\frac{1}{4}$
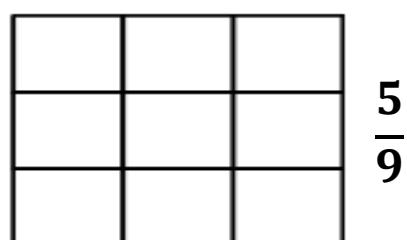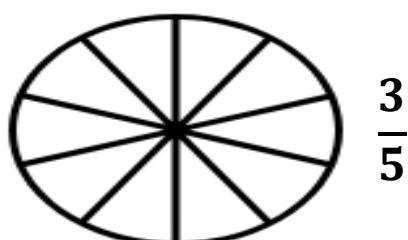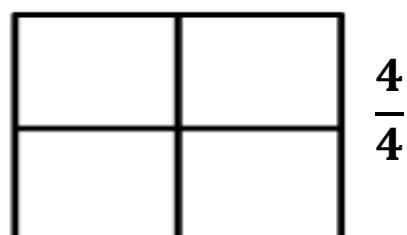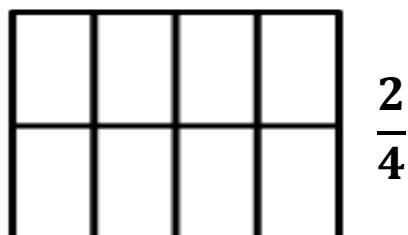
1.6) Arrange in descending order.

$\frac{1}{4}$; $\frac{3}{5}$; $\frac{2}{2}$; $\frac{4}{5}$; $\frac{1}{3}$

_____

1.7) Arrange in ascending order.

2. $\frac{2}{4}$; $\frac{4}{5}$; $\frac{1}{2}$; $\frac{7}{9}$; $\frac{5}{3}$

_____

1.8) Colour the correct fractional part.

$\frac{2}{4}$

$\frac{1}{3}$

$\frac{1}{2}$

$\frac{4}{4}$

$\frac{3}{5}$

$\frac{5}{9}$

1.9) Complete the following.

a) $\dfrac{2}{3}$ OF 90

_____

_____

_____

b) $\dfrac{4}{5}$ OF 450

_____

_____

_____

c) $\dfrac{6}{7}$ OF 84

_____

_____

_____

d) $\dfrac{9}{10}$ OF 110

_____

_____

_____

1.10) problem solving with OF equations

a) Rika has 110 sweets. She hands out $\dfrac{3}{5}$ of it at school. How many sweets does she have left ?

_____

_____

_____

b) Mika buys 96 soft drinks. $\dfrac{1}{3}$ of which is Coke , 15 is Fanta. How many will be Crème Soda?

_____

_____

_____

_____

_____

_____

c) There are 450 balls in the box. $\frac{4}{5}$ has already been inflated. How many balloons still need to be inflated?

_____

_____

_____

_____

_____

d) Riaan bought 320 bags. $\frac{1}{4}$ is blue, $\frac{3}{8}$ is yellow and the rest are pink. How many pink bags are there?

_____

_____

_____

_____

1.11) Convert the improper fractions to mixed numbers.

a) $\frac{45}{7}$

b) $\frac{82}{3}$

_____   _____

_____   _____

c) $\frac{26}{4}$

d) $\frac{51}{6}$

_____   _____

_____   _____

1.12) Convert the mixed numbers to improper fractions.

a) $4\frac{2}{4}$

b) $8\frac{5}{6}$

_____

_____

_____

_____

c) $11\frac{2}{3}$

d) $15\frac{2}{5}$

_____

_____

_____

_____

1.13) adding and subtracting fractions with the same denominators

a) $4\frac{2}{4} + 4\frac{1}{4}$ = _____

b) $2\frac{3}{5} + 2\frac{2}{5}$ = _____

c) $1\frac{4}{8} + 2\frac{2}{8} - 1\frac{3}{8}$ = _____

d) $8\frac{6}{8} - 4\frac{4}{8} + 6\frac{6}{8}$ = _____

1.14) adding and subtracting fractions with different denominators

a) $4\frac{2}{3} + 4\frac{1}{6}$

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

_____

_____

_____

_____

_____
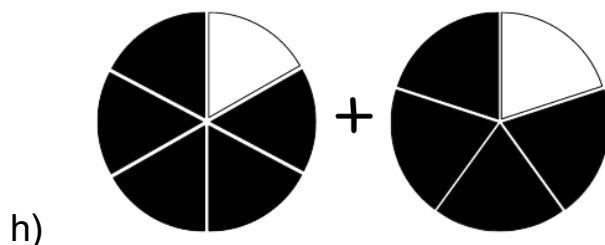
_____

c) $10\frac{1}{3}$ - $4\frac{2}{4}$

d) $4\frac{3}{6}$ + $6\frac{1}{4}$

_____

_____

_____

_____

_____

_____

e) $\frac{2}{3}$ + $\frac{2}{5}$

f) $5\frac{2}{7}$ + $6\frac{1}{3}$

_____

_____

_____

_____

_____

_____

g) $2\frac{1}{3}$ + $5\frac{1}{4}$ - $3\frac{1}{2}$

b) $3\frac{1}{7}$ - $1\frac{2}{5}$

_____

_____

_____

_____

_____

_____

h)

 +

1.15) What fraction is it ?

a) four of six equal parts : _____

b) three of twelve equal parts : _____

c) nine of 16 equal parts : _____

1.16) Simplify

a) $\dfrac{6}{10}$: _____   b) $\dfrac{25}{50}$: _____   c) $\dfrac{28}{35}$: _____

1.17) Test your fractions knowledge.

a) What is the top number of a fraction called ? _____

b) What is the bottom number of a fraction called ? _____

c) What do equivalent fractions mean ?

_____

d) Is the following statement true or false? A fraction is when a whole is broken down into unequal parts. _____

c) What would you call a fraction with the same numerator as denominator ? _____

d) What is a fraction called with a greater numerator as a denominator ?

_____

e) What is a fraction called with a smaller numerator as a denominator ?

_____

d) What do we call a fraction consisting of an integer and a proper fraction?

_____

question 2 : length

2.1) Complete the table.

mm	cm	m
2000		
		50
	1200	
		240
		$\frac{1}{4}$

2.2) Answer the following questions.

a) How many meters are in 2.5km ? _____

b) How many cm are in $6\frac{1}{2}$ m ? _____

c) How many km in 3550m ? _____

d) How many mm in 32cm ? _____

e) How many cm in 650mm ? _____

f) How many meters in $12\frac{3}{4}$ km ? _____

g) How many cm in $\frac{1}{2}$ m ? _____

2.3) convert

a) 3560m = _____km & _____m

b) 720cm = _____m & _____cm

c) 895mm = _____cm & _____mm

d) 2,65km = _____m

e) 5,25m = _____cm

f) 3,85km = _____m

g) 45,5cm = _____mm

h) $\frac{1}{2}$ km = _____m

i) $\frac{1}{4}$ m = _____cm

j) $\frac{3}{4}$ km = _____m

k) 2500m = _____km

l) 590cm = _____m

m) 9600m = _____km

2.4)   If one lap around the school is 850m, how many km will you jog if you jog around the school 4 times?

_____

_____

_____

2.5)   The carpet's dimensions in 1770cm by 1560cm . What will the dimensions in meters be ?

_____

2.6)   Kian rides his bike to his friend's house every day. He drives 720m there. How many km will Kian drive in a school week if he drives to his friend and back every day?

_____

_____

_____

2.7) Mom has a vegetable garden. The length is 550cm and the width is 380cm

She wants to put fence around the vegetable garden, but the wire is purchased by the meter. She also wants to keep space for an 80cm gate. How many m of wire is she going to need ?

_____

_____

_____

_____

_____

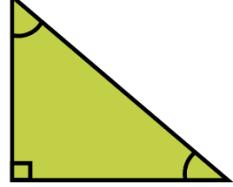2.8) Johan has to buy 25,5m of wire for his sheep pen at R62 per metre. What is the wire going to cost him?

_____

_____

_____

_____
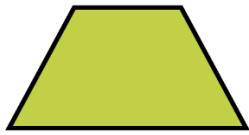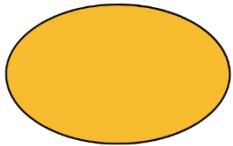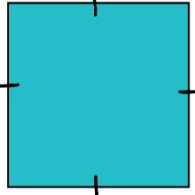
2.9) Marna jogs $\frac{3}{5}$ of 2km with her horse . How far did they go?

_____

_____

_____

2.10) Liam has to dig a slope $\frac{2}{6}$ of 3km . How far will he dig?
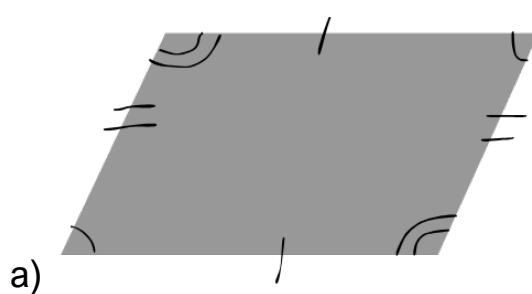
_____

_____

_____

_____

2.11) Five ropes measure 2,35m ; 640cm; 50cm; 325cm ; 1,25m

How long will they be all together ?

_____

_____

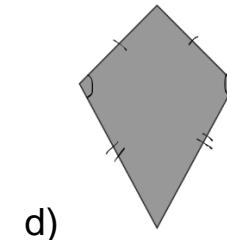**question 3 : 2D en 3D**

3.1) Complete the table below.

shape	name	Number of straight sides	Number of curved sides	angles

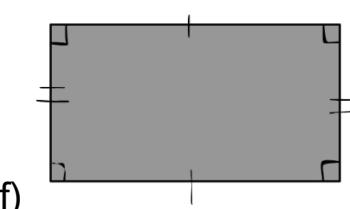3.2) Label the shape and also describe the characteristics indicated.

a)

b)

_____   _____

_____   _____

_____   _____

_____   _____
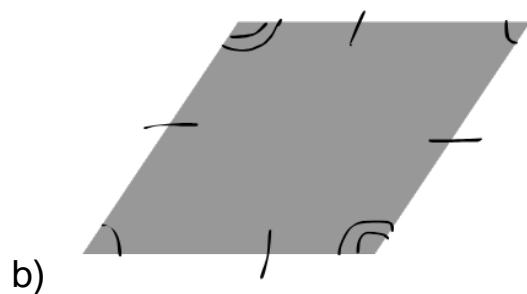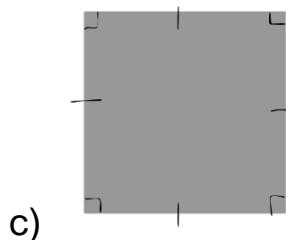
c)

_____

_____

_____

_____

_____

d)

_____

_____

_____

_____

_____
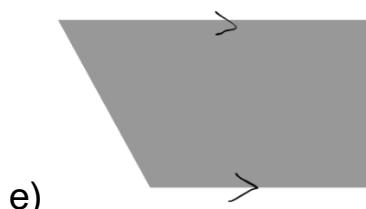
e)

_____

_____

_____

_____

f)

_____

_____

_____

_____

3.3) Give the Mathematical names for the following:

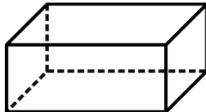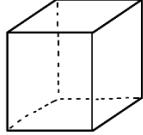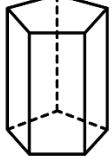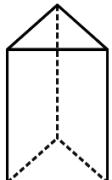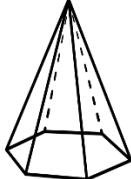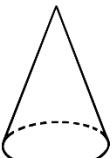|	
2D shape with 5 straight sides	
2D shape with 6 straight sides	
2D shape with 7 straight sides	
2D shape with 8 straight sides	
2D shape with 9 straight sides	
2D shape with 10 straight sides	

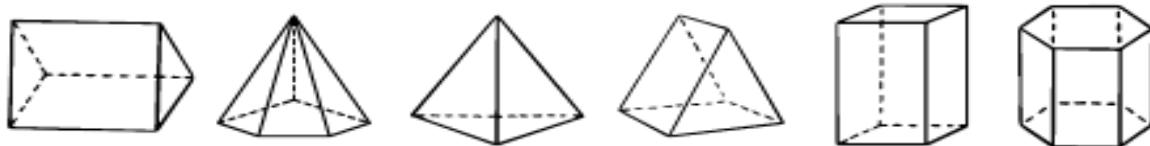3.4) Provide the definition for each of the following.

a) polygon : _____

b) regular polygon : _____

c) three-dimensional figure : _____

3.5) Label each figure and complete the table. Also say how many flat faces as well as the shapes of the faces.
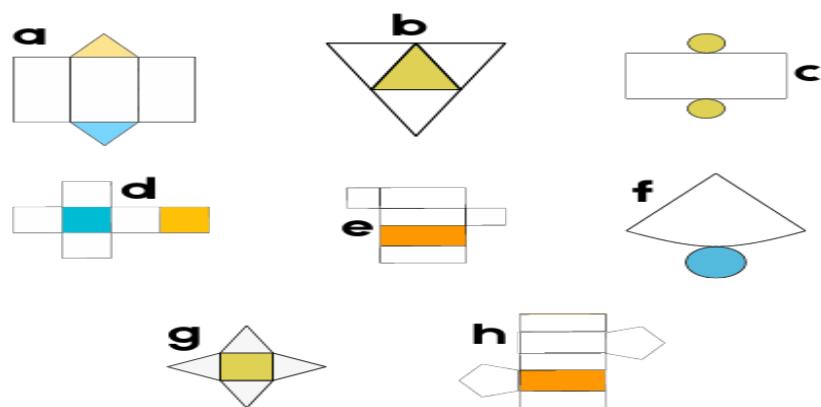
figure	name	faces	vertices	edges

3.6) Mark all the prisms with a cross.

3.7) Explain the difference between a pyramid and a prism.

_____

_____

3.8) Identify the 3D figure represented by each net.

a) _____   b) _____

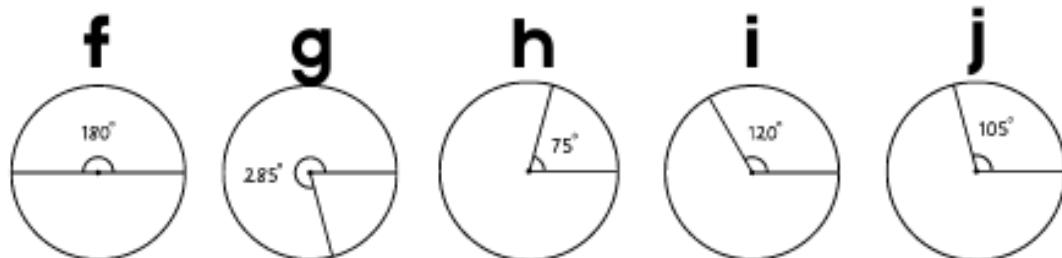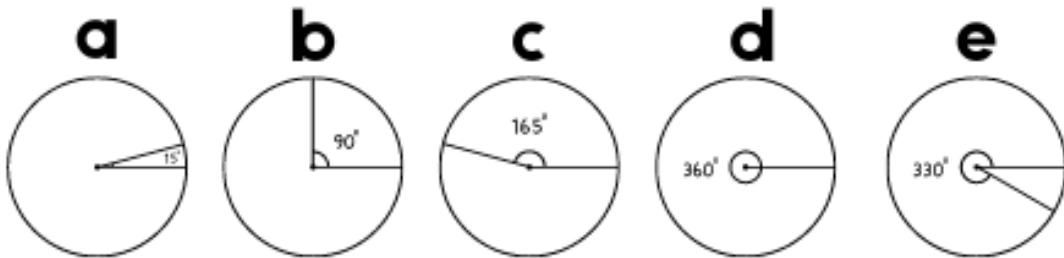c) _____   d) _____

e) _____   f) _____

g) _____   h) _____

3.9) Complete the table

figure	differences	similarities
A en B		
B en G		

3.10) What are the difference and similarity between a rectangular prism and a cube?

_____

_____

3.11) What would you call a figure made up of two heptagons and seven rectangles?

_____

3.12) Label each angle according to the size.

a) _____   b) _____

c) _____   d) _____

e) _____   f) _____

g) _____   h) _____

i) _____   j) _____

3.13) What is a triangle that has one right angle called? _____

3.14) What is a triangle called that has one obtuse angle?

_____