MATHEMATICS

ITEM 1:

The Ministry of Education and Sports instructed all the school Headteachers in Uganda to give details about the number of their students by the end of this month so that they can easily budget for every child undergoing the lower secondary curriculum. The Headteacher during his survey found out that: 20% of the students in a school are males and there are 7200 students altogether.

TASK:

As a learner of mathematics, help the Headteacher to know;

a) The percentage of males in the school
b) How many more females than males are in the school?
c) If 25% of the school female students are day scholars, how many female students are in boarding?
d) If all male students are in boarding and 3 students share a decker, how many deckers are needed to accommodate all the female students?

ITEM 2:

During the course of study in your class, your Mathematics teacher talked of the terms that make up mappings and relations. Now your father has requested you to clearly explain to him the following terms,

a) (i) Domain
   (ii) Range
   (iii) A function
b) Set A maps on to set B by the operation "Divide by 2 add 3". If set A = $\{4, 8, 12, 16, 20, 24\}$
   i). Help your Mr. Jimmy to list the elements of Set B.
   ii). Find the ordered pairs
   iii). Draw the graph of the relation
c) If $g(x) = qx + 3$ and $g(5)=23$, find the value of;
   i). q
   ii). g(0)
   iii). g(-5)

ITEM 3:

During COVID-19, the ministry of health conducted a research and found out the active cases in some districts in Uganda. The results were recorded in the table below.

District	Buikwe	Elegu	Busia	Mutukula	Malaba
Active cases	24	350	150	120	56

Task: .

Advise the Ministry of health on how you can represent the above information on a pie-chart.