

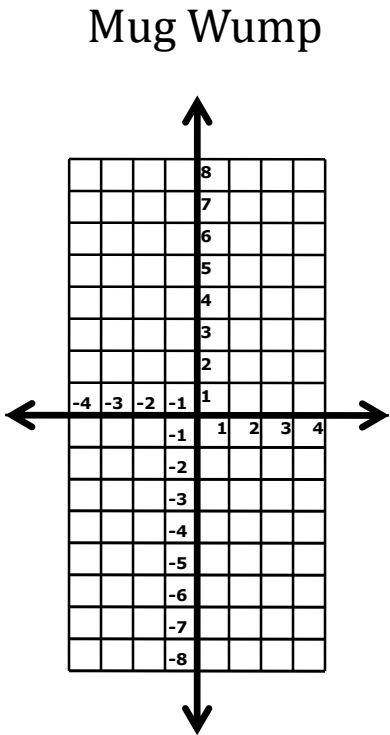
	Mug Wump	Zug	Lug	Bug	Glug
Rule	(x, y)	(2x,2y)	(3x,y)	(3x,3y)	(x,3y)
Point	Start	Start	Start	Start	Start
A	(-1, -7)	(-2, -14)			
B	(-1, -3)	(-2, -6)			
C	(-3, -3)				
D	(-3, -2)				
E	(-1, -2)				
F	(-3, 1)				
G	(-3, 5)				
H	(-2, 8)				
I	(-1, 5)				
J	(2, 5)				
K	(3, 8)				
L	(4, 5)				
M	(4, 1)				
N	(2, -2)				
O	(4, -2)				
P	(4, -3)				
Q	(2, -3)				
R	(2, -7)				
S	(1, -7)				
T	(1, -4)				
U	(0, -4)				
V	(0, -7) Connect V to A				
	Start	Start	Start	Start	Start
W	(-2, 1)				
X	(-1, 0)				
Y	(2, 0)				
Z	(3, 1)				
	Start	Start	Start	Start	Start
AA	(0, 1)				
BB	(1, 1)				
CC	(1, 3)				
DD	(0, 3) Connect DD to AA				
	Start	Start	Start	Start	Start
EE	(-1, 4) Make a dot				
FF	(2, 4) Make a dot				

A computer game stars a family called the Wumps. The members of the Wump family are various sizes, but they all have the same shape.

Some of these characters are family to Mug but some are **IMPOSTERS**. After drawing the four Wumps, attempt to identify the family members and the imposters.

Drawing Wumps

Complete this table using the rules given for each game character

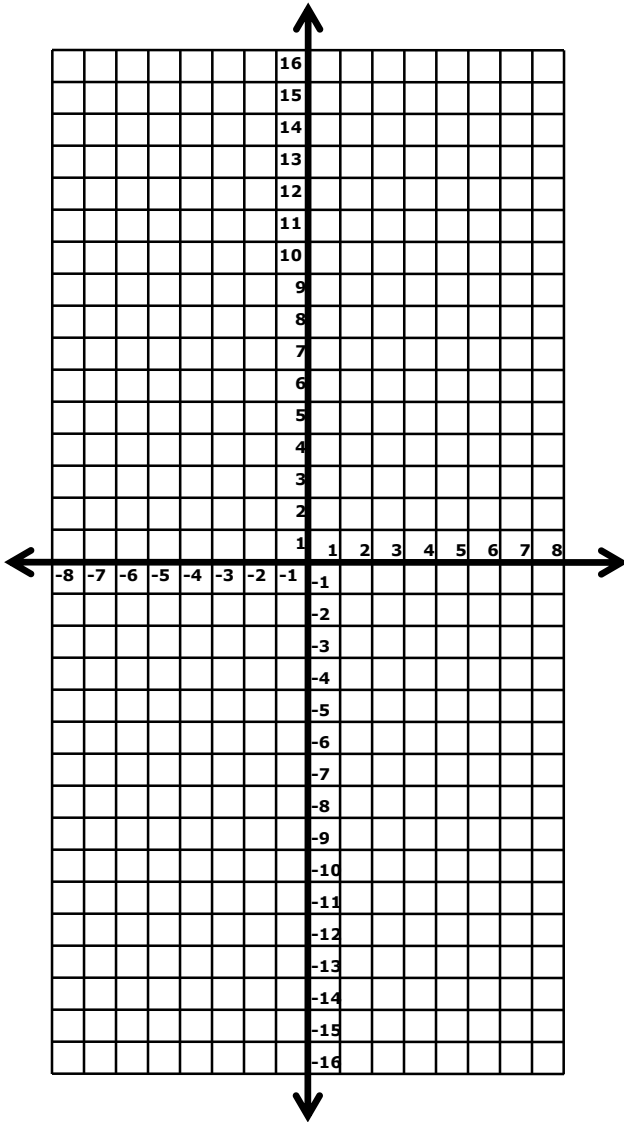


Zug Wump

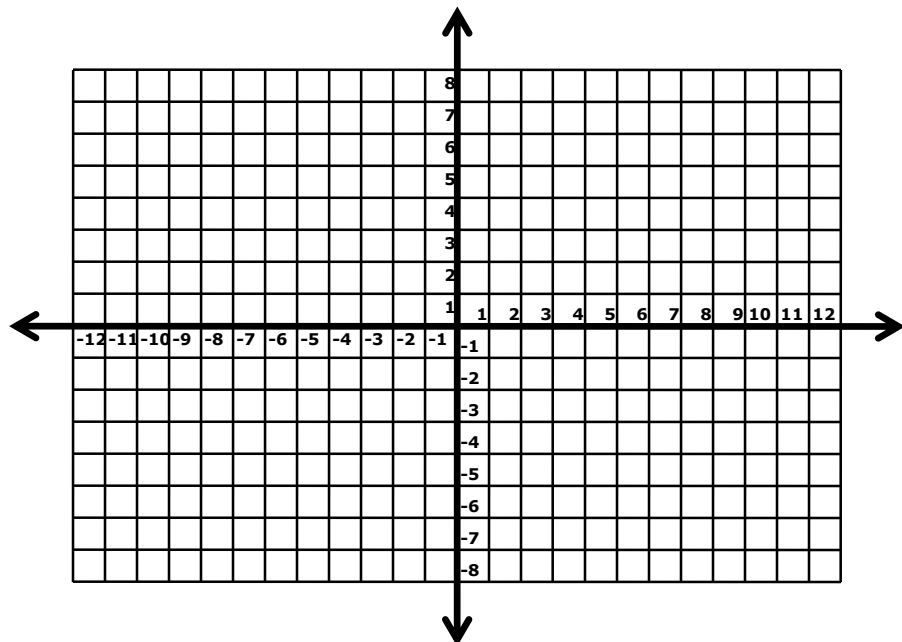
Name: _____

Drawing Wumps

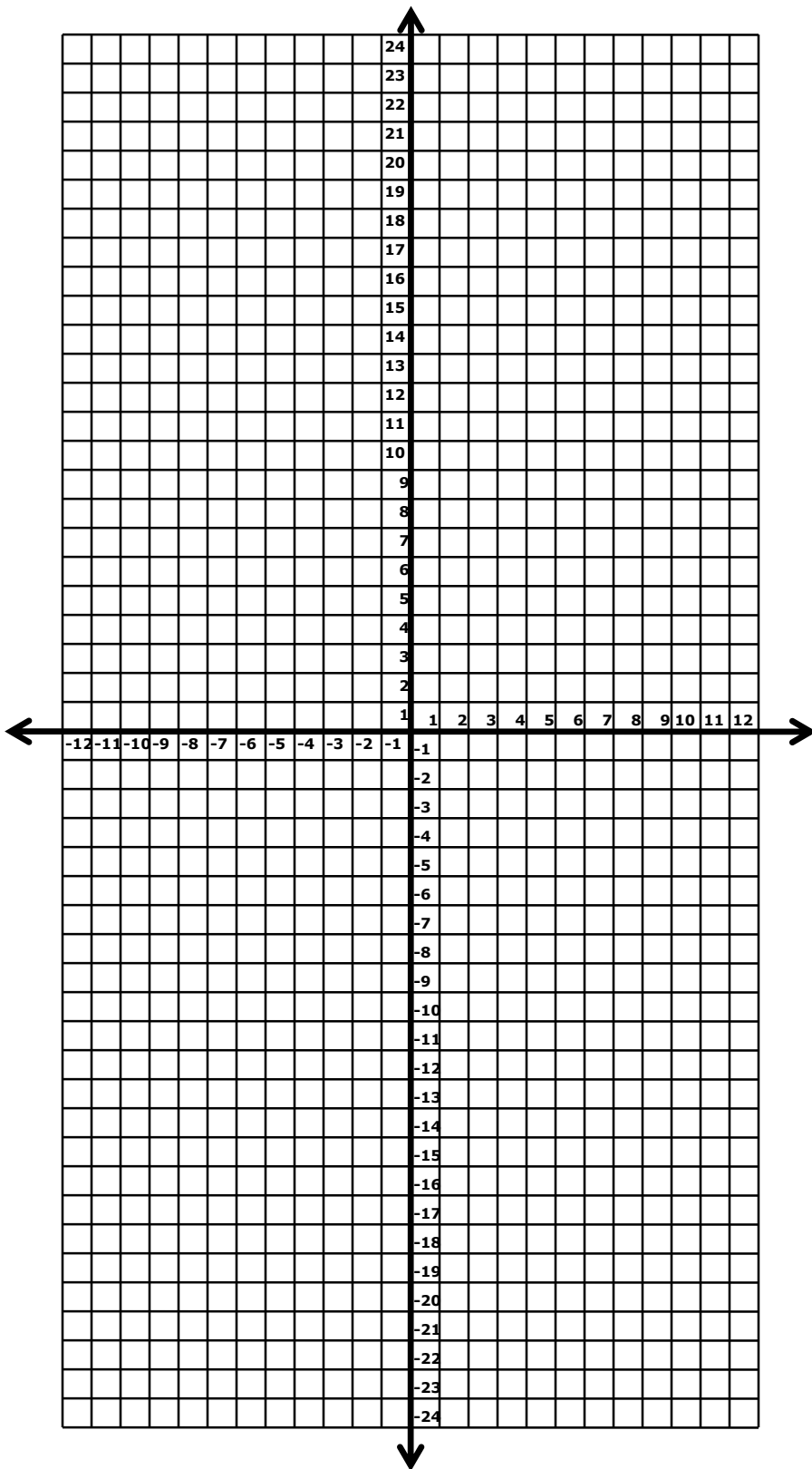
Use your completed table to draw Zug and Lug below. Draw Bug and Glug on the back of this sheet.



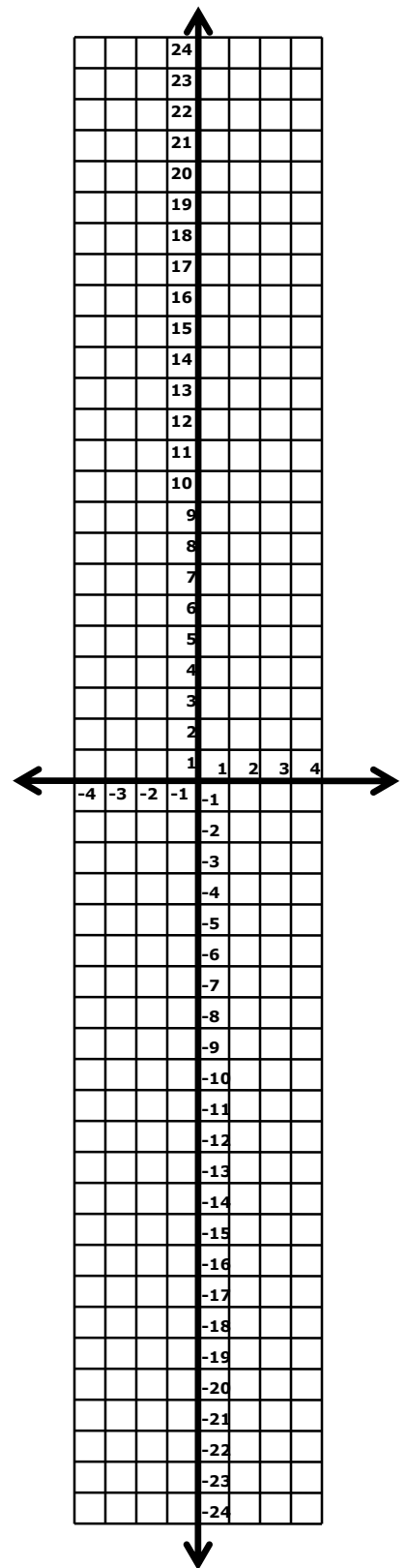
Lug Wump



Bug Wump



Glug Wump



Which of the Wumps are relatives of Mug and which are imposters? Justify your reasoning with mathematical observations and comparisons (using the empty space on any of these sheets).