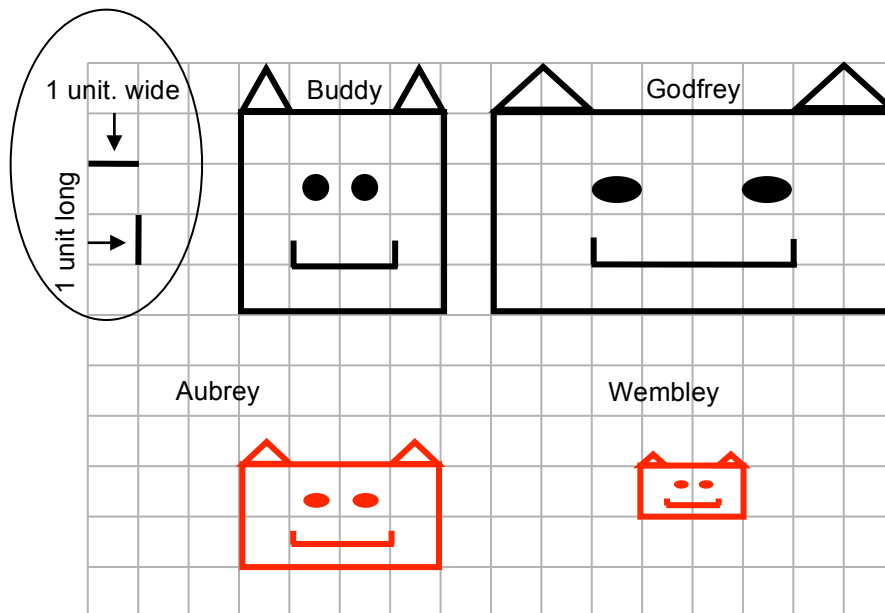# R10a – MARCELLUS THE GIANT

Go to student.desmos.com, get the class password from your teacher, and do the Desmos activity called Marcellus the Giant.

Go to lesson 3.3, Getting Started, and you'll find Buddy and his buddies. Aubrey and Wembley are other friends.

1. Draw Aubrey's face, which is proportional to Godfrey's face, multiplied by a scale factor of $\frac{1}{2}$.

2. Draw Wembley's face, which is also proportional to Godfrey's face, multiplied by a scale factor of $\frac{1}{4}$.

3. Fill in the table below. Pay close attention to how (width) and (length) are labeled.

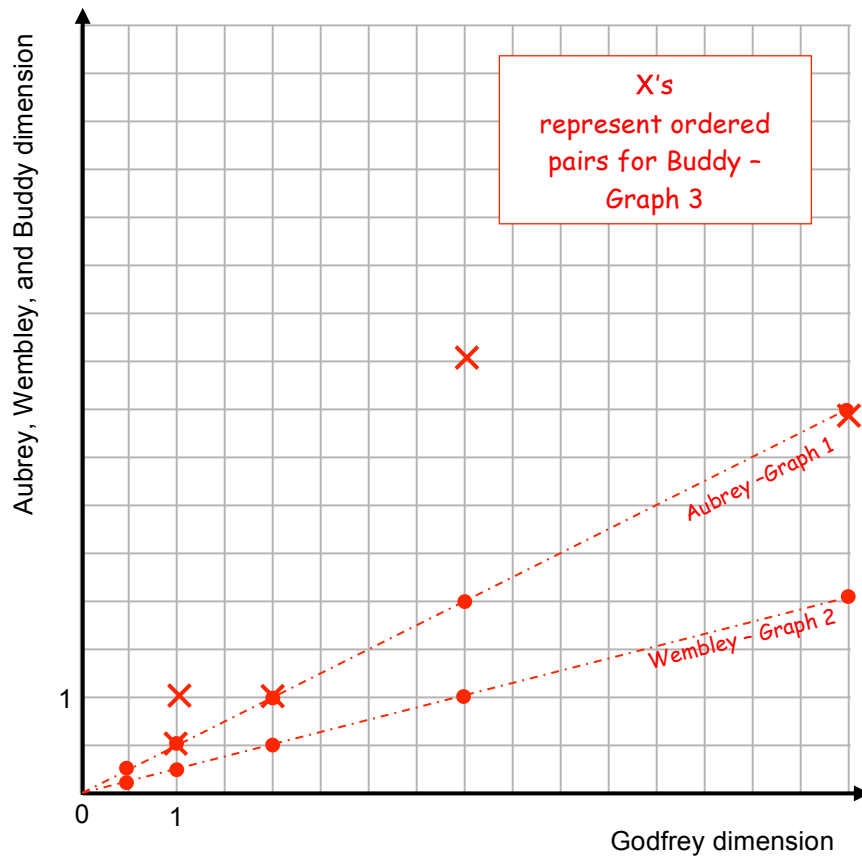|	Face width	Ear width	Face length	Ear length	Mouth width
Buddy's dimensions	4	1	4	1	$\frac{1}{2}$
Godfrey's dimensions	8	2	4	1	$\frac{1}{2}$
Aubrey's dimensions	4	1	2	$\frac{1}{2}$	$\frac{1}{4}$
Wembley's dimensions	2	$\frac{1}{2}$	1	$\frac{1}{4}$	$\frac{1}{8}$

R10b – MARCELLUS THE GIANT

4. Draw the following graphs, comparing Godfrey's dimensions with the others. Use a different color for each.

   Graph 1 Ordered pairs in the form (Godfrey dimension, Aubrey dimension).

   Graph 2 Ordered pairs in the form (Godfrey dimension, Wembley dimension).

   Graph 3 Ordered pairs in the form (Godfrey dimension, Buddy dimension).

5. For which graphs do all five points lie on a straight line? *Graphs 1 and 2*

6. Which graphs are lines that go through the origin? *Graphs 1 and 2*

7. Which faces are proportional to Godfrey? *Aubrey and Wembley*