3D Graphing Lab

Name: _____

All of the pictures you see in the room have been suspended somewhere in 3-dimensional space. You will be asked to demonstrate your understanding of 3-dimensional graphing by answering the following questions. For the purpose of this assignment, consider the picture of Mr. Nobbe to be located at the origin (0,0,0). (In other words, the world revolves around me).

1. Find the coordinates of yourself and four other friends.

Name	Coordinates
1.	
2.	
3.	
Self.	

2. What is the distance between your picture and Mr. Nobbe's picture?

3. If you were to write a vector equation for the path that would bring you to the origin in 4 seconds, what would the vector equation be?

4. What are the parametric equations for the vector equation above?

5. Determine who is pictured at the following coordinates:

Name	Coordinates
1.	(1, 0, 2)
2.	(1, -2, -2)
3.	(-1,2,2)

6. Find the following midpoints and determine whose picture is located there.

Coordinates	Midpoint	Who Is It?
(1,0,2) and (1,-2,-2)		
(1,0,2) and (-1,2,2)		
(1,-2,-2) and (-1,2,2)		

7. Choose the picture of one of your friends. If you and your friend were both going to meet me in four minutes, what are the vector equations that would describe your paths?