Physically Creating Three Dimensional Graphs – Class Handout

As you and your classmates create human and yarn versions of the graphs for each of the following functions, briefly record what the graph looks like.

1. Plot the point $(3, 2, 1)$.

2. Graph $x = y = z$.

3. Graph $x = y$.

4. Graph $x^2 + y^2 = 9$.

5. Graph $z = x^2$.

6. Graph $z = 3$.

7. Describe the set of points that are one unit from $(0, 0, 0)$.

8. Graph $z = x^2 + y^2$.