Name:

NetID:

1.) What is the difference between gradient descent and backpropagation?

Gradient descent is the iterative method via which we find a set of parameters that minimizes our loss function. Backprop is an application of the chain rule to find gradients in a NN

2.) Give an example of an activation function and explain where and why we want to use activation functions in a neural network.

The sigmoid activation function $\frac{1}{1+e^{-z}}$

We use these between layers to introduce non-linearity into the network. Activation functions like sigmoid or softmax also help us in tasks like classification.