Questions to Answer:

1) Name the three different geoprocessing tools that you utilized, and why you selected those three.

First I created a 1 mile buffer around the fire stations.
Then I did a clip of the fire incidents layer with the 1 mile buffer in order to see how many incidents occurred within 1 mile of a fire station. I did a clip instead of an intersection so that the output layer would only include attributes from the fire incidents layer.

Next, I created a 2-mile buffer around the fire stations
Then, I did a clip between of the fire incidents layer with the 2-mile buffer in order to see how many incidents occurred within 2 miles of a fire station.

Next, I performed a difference where the fire incidents were my input and I used the 2-mile buffer as the overlay. The output gave me just the fire incidents that occurred over 2 miles away from a fire station.

Finally, I created a difference in which the 2-mile buffer was my input layer and the 1-mile buffer was the overlay layer in order to create an area that is less than 2 miles but more than 1 mile away from a fire station. I used this difference layer as an overlay for a clip of the fire incidents layer in order to see how many fire incidents occurred more than 1 mile away but less than 2 miles away from a fire station.

2) How many fire incidents were located less than one mile away fire department locations?

7562 fire incidents

3) How many fire incidents were located less than two miles away from fire department locations?

11657 fire incidents

4) How many fire incidents were located greater than one mile away from current fire department locations, but less than two miles away?

4095 fire incidents

5) How many fire incidents were located greater than two miles away?

522 fire incidents