Question 1

1. What is the name and EPSG code of the coordinate system for the parcels shape? (Hint: You can google it. However, there are two answers to the code as it has been changed. I will accept either one.) ***<1 pt>***

NAD 1983 StatePlane California VI FIPS 0406 (US Feet)

EPSG Code is 2230, previously it was 102646

1. What is the unit of measurement for this coordinate system? ***<1 pt>***US Feet
2. There is an ACREAGE column in the attribute table, but why we are recalculating it? Did you see any difference? ***<1 pt>***

Question 2

1. How many number of parcel features are there? \*\*\*<1 pt>\*\*\* >> 15344
2. What is the smallest parcel area in acres? \*\*\*<1 pt>\*\*\* >> 0.000361
3. What is the largest parcel area in acres? \*\*\*<1 pt>\*\*\* >> 249.353164
4. How many parcels you found after using the Query? \*\*\*<1 pt>\*\*\* >> 113

Question 3

1. How many parcels are selected after these filtering? \*\*\*<1 pt>\*\*\* >> 78

Question 4

1. How many parcels are selected after filtering the excluded areas? \*\*\*<1 pt>\*\*\* >> 67

Question 5

a. How many parcels are selected after filtering the streets? (Hint: if your answer is not 30. go back and double check everything you did.) \*\*\*<1 pt>\*\*\* >> 30

Question 6

a. What could be an alternative (but easier) way to calculate Site\_ID instead of this Python solution? \*\*\*<1 pt>\*\*\* >> Use automatically calculated FID as the Site\_ID.

Question 7

a. How many parcels are selected after filtering for average slope? \*\*\*<1 pt>\*\*\* >> 25

Question 8

a. What is the difference between creating a buffer around a point and creating a service area aroung a point? To learn more, visit this [link](https://pro.arcgis.com/en/pro-app/latest/help/analysis/networks/network-analyst-solver-types.htm#ESRI\_SECTION1\_B826A1BEEC9142DD860980BC99B71000) and navigate to service area. \*\*\*<1 pt>\*\*\* >>

Question 9

a. Why the `Cutoffs` is selected as `1500 Feet`? Why we could not use a simple buffer in this case? (Hint: Read the background of this lab) \*\*\*<1 pt>\*\*\* >>

Question 10:

a. How many streets you got? \*\*\*<1 pt>\*\*\* >>

Question 11

a. What could happen if you did NOT uncheck the \*\*Keep All Target Features\*\*? \*\*\*<1 pt>\*\*\* >> The join would keep all the rows from the target features.

Question 12

a. Submit a map with the candidate site locations as you see fit. Be sure to create a visually pleasing map with other layers, necessary labels, basemap so that your stakeholders understand the message you want to give. Use your best judgements on creating a good map. \*\*\*<5 pt>\*\*\*

b. Did you learn any new geoprocessing tool today? If yes, what was that and give one sentence explanation of that geoprocessing tool. If not, then specify in what capacity you used the Network Analyst before? \*\*\*<2 pt>\*\*\*

c. Give me at least one other criteria that could be used in this preliminary analysis. (Hint: it does not have to be perfect) \*\*\*<2 pt>\*\*\*