***SOIL 4213 Quiz 1. 2-5-2016 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

1) List the three components of the Stanford equation (Nitrogen Recommendation).

2) Circle the Correct answer. Yield Maps can be used for determining the **Nitrogen Phosphorus** fertilizer recommendations for a field.

3) Circle the Correct answer. Soil Test results can be used for determining the **Nitrogen Phosphorus** fertilizer recommendations for a field.

4) List the three Segments of GPS.  
  
  
5)What is the difference between a DGPS like WAAS and RTK?  
  
Bonus, What does DGPS stand for?

***SOIL 4213 Quiz 2. 2-26-2016 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

1) “The science and art of obtaining information about an object, area, or phenomenon through the analysis of data acquired by a device that is not in contact with object, area, or phenomenon under investigation. “ is the definition of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?

2) Incoming radiation interacts with an object and may follow three exit paths. List all three  
  
 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
3) Which of the following is not a step to Utilize Remote Sensed Data?

a) Collect data  
b) Process image data (rectification, radiometric correction, and georeferencing)  
c) Adjust for collection altitude  
d) Examine image and analyze statistical data  
e)Perform ground truthing of remote-sensed data

4) Name one advantage and one disadvantage of satellite data.  
  
Advantage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
  
Disadvantage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5) Fill in the blanks



Bonus:  
  
Explain(with some level of detail) what the difference is between Active and Passive sensors.

***SOIL 4213 Quiz 3. 3-21-2016***

**1)** **The FAA is responsible for air safety from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ up.**

**2) True or False, It is illegal to charge for consulting with UAVs but legal for a land owner to check his/her cattle with one.   
  
3) List the three types of aircraft Operation.**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   
  
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***SOIL 4213 Quiz 4. 4-11-2016***

**1)** **Most commercial liquid systems have a \_\_\_\_\_ second response time.**

**a) 0.5, b) 1.0 c) 2.0 d) 5.0 e) 10.0**

**2) True or False, It is not only legal for a land owner to check his /her cattle with UAVs but it is also legal for a consult to use a UAV to scout and crop and charge or it.   
  
3) Describe the difference in a Map based VRA versus a Sensor based VRA.   
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**4) There are three typical methods to adjust a liquid control. Identify all three.**

**a) Check Valve b) Brake Point c) By-pass d) Valve Speed e) Dead-Band  
  
5) What are two methods of increasing the rate range of a nozzle?**

**Bonus Up to 6 pts possible. The more info the more points.   
Why is it important to precision ag to have a greater range in a single nozzle.**

***SOIL 4213 Quiz 5. 4-18-2016***

**1)** **What are two Measures of Central Tendency?**

**2)** **What are two Measures of Dispersion?**

**3) If the mean and median values of a data set are nearly the same the dad set is likely distributed   
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**4) Name the Rs of statistics.  
r \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
  
r2 \_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
  
R2  \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
  
5) Which of these statistics are used to describe the relationship between the Independent (controlled) and dependent (result) variables?**

**Bonus) which multivariate interpolation procedure is used when the data set has less than 250 data points?**