Module Review

1. Which of the below are the core services that make up BigQuery? (choose the correct 2)

- [x] Query service

  ✓ **Correct**

- [x] Storage service

  ✓ **Correct**

- [ ] Data Optimization service
- [ ] Machine Learning service

2. You want to know how many rows are in the BigQuery Public Dataset on San Francisco Bike Shares. What could you do?

- [x] In the BigQuery Web UI, find the table and click the details tab and view the rows.

  ✓ **Correct**

- [ ] # Run the below query:

  ```
  SELECT
   SUM(*) AS total_trips
  FROM
   `bigquery-public-data.san_francisco_bikeshare.bikeshare_trips`
  ```

- [x] # Run the below query:

  ```
  SELECT
   COUNT(*) AS total_trips
  FROM
   `bigquery-public-data.san_francisco_bikeshare.bikeshare_trips`
  ```

3. True or False: You can query a Google Spreadsheet directly from BigQuery without loading it in first.

- (●) True
- ( ) False

✓ **Correct**
Correct - this is a federated query

4. You have a taxi service data schema that has three columns:

- ride_id
- ride_timestamp
- ride_status

You want to use BigQuery for reporting but you don't want to split your table into multiple sub-tables. What native features of BigQuery data types should you explore? (check all that apply)

- [x] Consider making ride_timestamp an **ARRAY** of timestamp values so each ride_id row in your table could still be unique and easy to report off of.

✓ **Correct**

- [x] Consider adding lat / long geographic data points as new columns and using **GIS Functions** to quickly plot the distances your fleet has travelled.

✓ **Correct**

- [ ] Consider renaming the ride_id column to 'label' so you can use it in a **BigQuery ML model** to predict the ride_id of the next ride.

5. Complete the following

In ML, a row of data is called a(n) _____ and a column of data is called a(n) _____. We mark one or more columns as _____ which we know for historical data and are trying to predict for future data.

- ○ 1. labels
  2. instance or observation
  3. feature
- ○ 1. instance or observation
  2. labels
  3. feature
- ◉ 1. instance or observation
  2. feature
  3. labels

✓ **Correct**