MySQL Exercise 8: Answer Key

Question 1:
%%sql
SELECT d.user_guid AS UserID, d.dog_guid AS DogID, d.breed, d.breed_type,
        d.breed_group
FROM dogs d JOIN complete_tests c
   ON d.dog_guid=c.dog_guid
WHERE test_name='Yawn Warm-up';

Question 2:
%%sql
SELECT r.dog_guid AS rDogID, d.dog_guid AS dDogID, r.user_guid AS rUserID,
        d.user_guid AS dUserID, AVG(r.rating) AS AvgRating, COUNT(r.rating) AS
        NumRatings, d.breed, d.breed_group, d.breed_type
FROM dogs d RIGHT JOIN reviews r
   ON d.dog_guid=r.dog_guid AND d.user_guid=r.user_guid
WHERE r.dog_guid IS NOT NULL
GROUP BY r.dog_guid
HAVING NumRatings >= 10
ORDER BY AvgRating DESC;

Question 3:
%%sql
SELECT d.user_guid AS dUserID, c.user_guid AS cUserID, d.dog_guid AS dDogID,
         c.dog_guid AS dDogID, count(test_name)
FROM dogs d LEFT JOIN complete_tests c
   ON d.dog_guid=c.dog_guid
GROUP BY d.dog_guid;

Question 4:
%%sql
SELECT d.user_guid AS dUserID, c.user_guid AS cUserID, d.dog_guid AS dDogID,
        c.dog_guid AS dDogID, count(test_name)
FROM dogs d LEFT JOIN complete_tests c
   ON d.dog_guid=c.dog_guid
GROUP BY c.dog_guid;

Question 5:
%%sql
SELECT COUNT(DISTINCT dog_guid)
FROM complete_tests;

Question 6:
```sql
SELECT u.user_guid AS uUserID, d.user_guid AS dUserID, d.dog_guid AS dDogID,
        d.breed
FROM users u LEFT JOIN dogs d
  ON u.user_guid=d.user_guid;
```

OR

```sql
SELECT u.user_guid AS uUserID, d.user_guid AS dUserID, d.dog_guid AS dDogID,
        d.breed
FROM dogs d RIGHT JOIN users u
  ON d.user_guid=u.user_guid;
```

Question 7:
```sql
SELECT u.user_guid AS uUserID, d.user_guid AS dUserID, d.dog_guid AS dDogID,
        d.breed, count(*) AS numrows
FROM users u LEFT JOIN dogs d
  ON u.user_guid=d.user_guid
GROUP BY u.user_guid
ORDER BY numrows DESC;
```

Question 8:
```sql
SELECT COUNT(user_guid)
FROM users
WHERE user_guid='ce225842-7144-11e5-ba71-058fbc01cf0b';
```

Question 9:
```sql
SELECT *
FROM dogs
WHERE user_guid='ce225842-7144-11e5-ba71-058fbc01cf0b';
```

Question 10:
```sql
SELECT COUNT(DISTINCT u.user_guid)
FROM users u LEFT JOIN dogs d
  ON u.user_guid=d.user_guid
WHERE d.user_guid IS NULL;
```

Question 11:
```sql
SELECT COUNT(DISTINCT u.user_guid)
FROM dogs d RIGHT JOIN users u
  ON d.user_guid=u.user_guid
WHERE d.user_guid IS NULL;
```

Question 12:
```sql
%%sql
SELECT s.dog_guid AS SA_dogs_not_present_in_dogs_table, COUNT(*) AS NumEntries
FROM site_activities s LEFT JOIN dogs d
  ON s.dog_guid=d.dog_guid
WHERE d.dog_guid IS NULL AND s.dog_guid IS NOT NULL
GROUP BY SA_dogs_not_present_in_dogs_table;
```