Laboratory Key #2 – Introduction to Quadrangle Maps

1. point 1   27° 36' 45" N,   99° 26' 50" W
    point 2   27° 36' 25" N,   99° 24' 55" W
    point 3   27° 31' 55" N,   99° 25' W
    point 4   27° 31' 40" N,   99° 22' 45" W
    point 5   27° 36' 50" N,   99° 23' 40" W
    point 6   27° 37' N,   99° 23' 20" W

2. North   point 6   (biggest latitude)
    West   point 1   (biggest longitude)
    South   point 4   (smallest latitude)
    East   point 4   (smallest longitude)

3. 4.15 miles

4. 11 inches X 0.379 miles/inch = **4.169 miles**

5. The fractional scale is the most accurate because it is based on the areal photos used to make quadrangle maps.

6. the contour interval is 10 feet

7. point 1 = 600 feet
    point 2 = 500 feet
    point 3 = 450 feet
    point 4 = 550 feet
    point 5 = 500 feet
    point 6 = 550 feet

8. Chacon Creek south of Lake Casa Blanca is flowing SW.

9. rise is 600 ft - 500 ft = 100 ft

10. run = 2 mile

11. slope = 100 ft/2 miles = 50 ft/mile

12. rise is 550 ft - 450 ft = 100 ft

13. run = 2.3 miles

14. slope = 100 ft/2.3 miles = 43.5 ft/mile

15.   the stream is flowing west

16.   rise is 550 ft - 500 ft = 50 ft

17.   run = 0.43 miles

18.   slope = 50 ft/0.43 miles = 116.3 ft/mile

19.   the stream is flowing southwest

20.   Question 17, between points 5 & 6, slope is steeper and contour lines are closer together