builderguy135’s Road Scholar Test
(Maps are at the bottom of the test packet)

School: ______________________________________

Names: __________________ & __________________

Score: _____/206
Part 1: Topographic Maps (___/78)

This following section uses “Map 1” in the folder.

1) What is the contour interval of this map? (1) ______________________
   a) When do contour lines intersect? (2) ______________________
   b) What do contour lines which are close together represent? (2) ______________________

2) What quadrangle is to the southwest of this map? (1) ______________________
   a) What is its scale? (1) ______________________

3) What is the magnetic declination of this map? (1) ______________________
   a) “True North” is usually marked with what symbol/shape? (2) ______________________
   b) There is usually a third kind of north on more recent maps, named GN. What is the full name of this north, and what does it mean? (1, 3)

   Name: ______________________

   Meaning: _____________________________________________________________________
   ______________________________________________________________________________

4) What state and county is this map located in? (1, 2) State: ______________. County: ______________

5) What is the scale of this map? (1) ______________________

6) When were the aerial photographs taken for this map? (2) ______________________

7) What kind of coordinate system does this map not have? (2) ______________________
   a) Name one other state that also does not use this system. (1) ______________________

8) What does the red tint over Abilene indicate? (2) ______________________

9) What is the latitude and longitude of the NE graticule tick mark?
   a) Latitude (2): ____°____’____”____
   b) Longitude (2): ____°____’____”____

10) What kind of projection did this map use? (2) ______________________

11) To the NW of Abilene is Hughes Airport. What is its elevation? (2) ______________________
This following section uses “Map 2” in the folder.

You are starting at the Twin Oaks School at the top of this map.

12) What is the PLSS description of this school? (2) _____________________________

13) What is the UTM description of this school? (2) _____________________________

14) What is the Latitude/Longitude of this school? (2) _____________________________

You turn right out of the school and travel about ¼ mile to Spencer Creek Road.

15) On the topo map, you see “465T”. What is this symbol called and what does it indicate? (1, 2) ___________________________________________________________________

You turn right on Spencer Creek Road. While driving, you cross a creek.

16) What is the name of this creek? (1) ___________________________

17) What type of stream is it? (2) _____________________________

18) Which direction does the stream go? (2) _____________________________

19) What is the stream gradient, starting and ending from where the main part of the stream enters and leaves the map? (3) __________________________

20) What is the slope between both of the northern graticule tick marks? (2) __________________________

You then turn left at Pine Grove Road. Your car can’t handle the slope of driving up this hill, so you start walking.

21) Disregarding trespassing, how many feet is it if you walk from the intersection of Pine Grove Road/Spencer Creek Road directly to the top of Briggs Hill? (2) __________________________

22) If you walked at 1.23 meters per second, how many minutes would that take? Round to the nearest minute. (2) __________________________

23) How high is Briggs Hill? (2) _________ ft.

24) To the west of the top of this hill, there is this symbol. In this case, what does this represent? (2) __________________________
You now teleport to SW ¼ / 20 / T19S / R4W, at the spot elevation.

25) What is the elevation at this spot? (2) ________________

You follow the dotted line towards the SE.

26) What type of road are you on? (3) ________________

27) After going more southward, what type of road does it become? (3) ________________

28) You meet a road. What is its azimuth if you were to go towards the SW direction? (2) ____________

29) What is the name of this road? (2) ________________

30) You turn left at this road and follow it off the map. What is the highest elevation this road will be at on this quad? (4) ____________

31) What is the elevation relative to? (2) ________________

Part 2: Profile (__/29)
This following section uses “Map 2” in the folder.

Make a profile from point A (1425 spot elevation) to point B (1281 spot elevation). This is near the SE of map 2, so feel free to use that as a reference.

32) Profile is accurate (Rate out of 15)

33) Streams and roads are labeled (8, 2 each)

34) A/B points labeled (3, 1.5 each)
Please draw your profile here:

35) What is the slope from point A to point B (Hint: find the scale first!)? (3) ______________

**Part 3: Highway Maps (__/44)**

*This following section uses “Map 3” in the folder.*

Fill in the table (1 each, total 3)

<table>
<thead>
<tr>
<th>Town</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>36) Denmark</td>
<td></td>
</tr>
<tr>
<td>37) Brazil</td>
<td></td>
</tr>
<tr>
<td>38) Syria</td>
<td></td>
</tr>
</tbody>
</table>

39) What state is north of Indiana? (2) ______________

You start in Wallen, Indiana.

40) How many state colleges and universities are there in Allen County? (2) ______________
41) There is a red star next to the name of “Fort Wayne”. What does this mean? (2) ________________

42) You drive east and head onto Route 3. What type of road is it? (2) ________________

43) You drive south onto I-69. If you were exiting I-69 to go to Route 3, what exit number would it be? (2) ________________

44) You drive south until you meet US-33. On the map, it is highlighted with a certain color. What does that mean? (3) __________________________________________________________________________

45) What river do you cross when you are at exit 300? (2) ________________

46) What is the name of the recreation area just east of Huntington? (2) ________________

47) I-69 now intersects with State Route 22. From this intersection, about how many miles is it to the next rest area? (3) ________________

48) After driving about 32 miles from the rest stop, you see a state police post. What is its name? (2) ________________

49) Look at the Indianapolis inset map. You turn left on to I-465. What State Park do you pass at exit 40? (2) ________________

50) You continue driving around I-465. What university do you pass on the way to the Indianapolis International Airport? (3) __________________________________________________________________________

51) What two interstates does I-465 split into just after passing the speedway? (2 each, total 4) ________________

52) What is the name of the reservoir that you pass to the left of I-465? (2) ________________

53) How many lanes is most of Crawfordsville Road? (2) ________________

54) What county are you in? (2) ________________

55) Crawfordsville Road is also known as what route? (2) ________________

56) If you were to leave the inset map with Crawfordsville Road, what county would you be in now? (2) ________________
Part 4: Topographic Map Drawing (__/31)
This map drawing is 1 PLSS section.

57) Label the map as section 16. (2)

58) Draw a road starting ½ mile to the east from the NW corner of the section, at a bearing of S 30 E. This should be a secondary highway. (3)

59) On the W ½ / NE ¼ / Sec. 16, draw 2 houses on each side of the secondary highway. (½ pt. Each, 2)

60) Draw a school on the east side of the secondary highway, next to the houses. (2)

61) Next to the school, draw in a track (athletic field). (3)

62) Draw a perennial lake on the SW ¼ / SW ¼ / Sec. 16 that is about 20 acres. (3)

63) Draw an intermittent stream and a perennial stream that flows into the lake. (3)

64) Using contour lines, draw a mountain in the NW ¼ of this section. The contour interval is 20 ft. You do not have to draw contour lines anywhere else on this map. (5)

65) Draw a trail from the top of the mountain to the lake. (3)

66) Draw a benchmark elevation at the top of this mountain. It should be 4106 feet tall. (2)

67) Draw an above ground pipeline running at an azimuth of 10° from the SW corner of this section. (3)
Identify the following features (2 each):

68) A ______________________
69) B ______________________
70) C ______________________
71) D ______________________
72) E ______________________
I live in Chipotle.

73) What is the distance, in miles, from my house to Bo Brooks? (3) ______________________

74) What is the name of the river in the west side of this map? (2) ______________________

75) Estimate the time at which this photo was taken. (4) __________________________

76) What kind of route passes through the San Diego Zoo? (2) ______________________________

77) NW of the Whaley House Museum, there is a green tree symbol. What does this symbolize? (3)

_______________________________________________________________________