Registering and Using Imagery within a GIS - Answer Key

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1) [The image file is evidently not registered]

2) [The angle would cause some distortion of the image]

3)

image file name	world file name
rosebud.tif	rosebud.tfw
sheboygan.jpg	sheboygan.jgw
southdakota.bil	southdakota.blw

4) [no]

5) [-97.26 W   49.43 N]

6) [.0107 degrees]

7) [.0087 degrees

8) [742]

9) [695]

10) [no]

11) [the image file is not registered]

12) [In the Atlantic Ocean, off the coast of West Africa, at 0 degrees latitude and 0 degree longitude. If there is no image registration information, the GIS software places the image at 0,0]

13)   [Upper Right hand: -89.60 W 47.92 N]

[Upper Left hand: -97.21 W   48.93 N]

14)

LINE1 = [.0103234]

LINE2 = [0]

LINE3 = [0]

LINE4 = [-.0084748]

LINE5 = [-97.24]

LINE6 = [48.94]

15) [Minnesota is west of the prime meridian]

16) [Should be close]

17) [Geographic coordinates]

18) [The image was displaying a little bit lower than the state

outline. It required some adjustments to the latitude and longitude lines.]

19) .01077457122

0

0

-.00871105121

-97.260

49.428

20) [no]

21) [The St Francis fire image file is not georegistered]

22) [Visible on the image are some roads and streams]

23) [stfrancisfire.jgw]

24) [0.000098

0.0000

0.0000

-0.000077

-101.0655

43.23   ]

25) [First it was important to try to get proportions close (distances between

features. Then the image can be moved up and down to line up with the

vector features]

26) The image file covers a larger area]

27) [415.53 sq km]

28) [58.3 sq km]

29) [Used the pointer tool to size the graphics]

30) [smoke is visible in the image]

[Special camera was used to "color code" water (green) and

also to determine temperature (warmer areas are in the red

spectrum]

31) [The resolution is much greater in the aerial photos]

32)   [center - pivot irrigated fields]

33) [With a GIS, an aerial view photo alone can be displayed in the correct

location and scale on a map by creating an appropriate world file.]

[With a GIS, the image can be moved and "stretched" by adjusting the

 values in the image's World file]

34) [In ArcView, image data and vector data can be displayed together. The image data can be adjusted to "fit" the vector data]

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