Image resolution & scanning resolution

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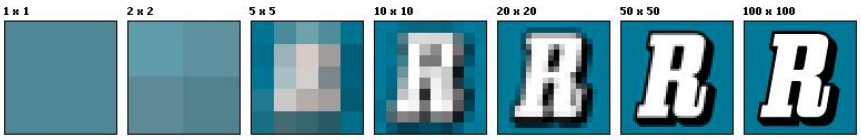
Image resolution

Refers to the amount of detail of an image measured in pixels



http://en.wikipedia.org/wiki/File:Resolution_illustration.png

Image detail can be increased utilizing a higher pixel number.

The pixel number is calculated by multiplying pixel height by pixel width.

example:

1536

2048

3,145,728 pixels or 3.1 megapixels

Scanning resolution

Refers to how many dots per inch (dpi) an image contains

As scanning resolution increases.....

- accuracy
- storage space requirements
- processing time

Scanning resolution

Refers to how many dots per inch (dpi) an image contains

Example of scanning resolutions available for a photograph at a scale of 1:24000.

Scanning resolution	2117 dpi	1016 dpi	300 dpi
Ground coverage (meters)	0.288	0.6	2.04
B/W file size (MB)	363	84	7

References

- http://en.wikipedia.org/wiki/File:Resolution_illustration.png
- http://desktoppub.about.com/od/scanningresolution/l/aa_scanspi.htm

Questions

1.) Image detail can be increased utilizing a higher _____ number.

2.) Convert 3,145,728 pixels to megapixels.

3.) As scanning resolution increases so does...
   a. accuracy
   b. storage space required
   c. both a and b

4.) A desired increase in land coverage per pixel when scanning an aerial image can be obtained by _____ the scanning resolution.

Answers on next slide…

Answers

- 1.) pixel
- 2.) 3.1 megapixels
- 3.) c
- 4.) increasing