

Name:

File size of bitmap graphics

1) If the width of a bitmap image is 1000 pixels, the height is 2000 pixels and the colour depth is 8 bits, estimate the size of size of the image in Mb.

Total number of pixels is $1000 \times 2000 = 2,000,000$

Colour depth is 8 bits which is 1 byte.

Therefore the size of the file is: $1 \times 2,000,000$ bytes

To convert to Mb we divide by 1,000,000

*So the file size in Mb is: **2Mb***

2) If the width of a bitmap image is 1000 pixels, the height is 500 pixels and the colour depth is 8 bits, estimate the size of size of the image in Kb.

3) If the width of a bitmap image is 212 pixels, the height is 432 pixels and the colour depth is 24 bits, estimate the size of size of the image in Kb.

4) If the width of a bitmap image is 322 pixels, the height is 416 pixels and there are only 2 colours (i.e. colour depth is 1 bit), estimate the size of size of the image in Kb.

5) If there are 15600 pixels in an image and the file size is 46800 bytes, what is the colour depth (i.e. how many bits per pixels are there).

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6) If I take a full colour 24 bit 10 Mega-pixel photograph with my camera what is the size of the image in Mb?

7) If you have a 1 Gb SD memory storage device on your camera, how many of these photographs could you store?

8) What is the width of the image that has 72dpi and is 460 pixels wide when output in a printer. Provide your answer in cm (there are 2.54 cms to 1 inch)?

9) What is the width of the image that has 95dpi and is 400 pixels wide when output on a printer. Provide your answer in cm (there are 2.54 cms to 1 inch)?

10) A composite satellite image covering world at 1km resolution has a 12 bands each with each band represented by 16 bits. What is the size of the image in Gb?