

The Digital Studio

Optimizing Your Images

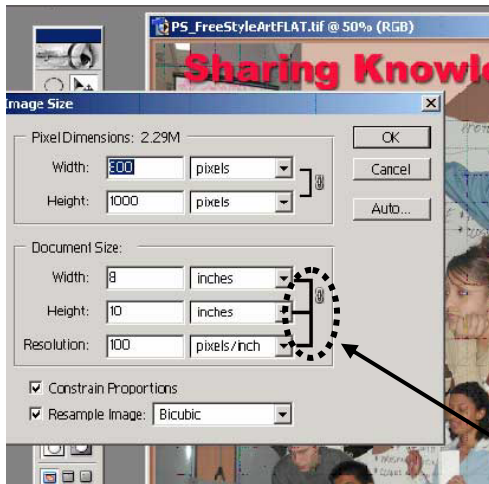
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Optimize – www.dictionary.com = "modify to achieve maximum efficiency". In this discussion we optimize the image to obtain the **smallest file size** with the **maximum acceptable quality**.

Reasons for "Optimizing" your image may be: A) To send it as an **email attachment**. Remember, images with smaller **file sizes** *transfer* faster between your computer and your friend's computer.

B) To put images on the **Web**. You want to have the smallest file size possible because they also need to "transfer" and load onto viewers' computers as fast a possible. C) Other.



1) First, **FLATTEN** the layers. Change the file name to protect/keep your layered image. See your handout/notes on flattening layers for more info.

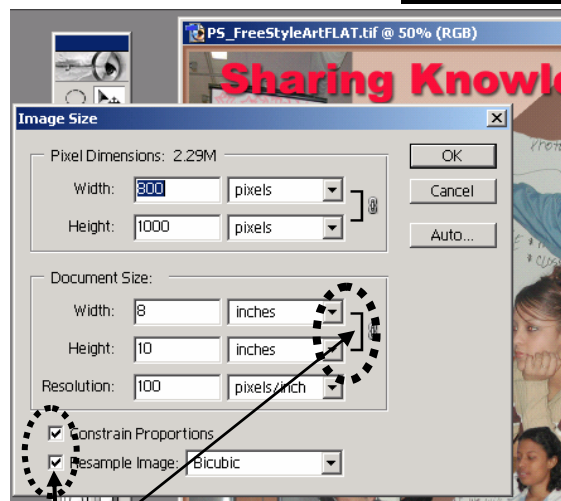
2) Choose your "**Resolution**" setting. But, what setting number to use??

It depends on how you want to use the image. Use these numbers as general guides.

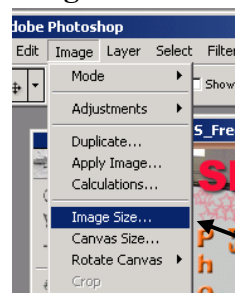
InkJet Printing: 100 to 150 dpi
Viewing on screen: 72 dpi (start with 150)
Offset Printing: 240 to 300 dpi

Be careful: If you have Width + Height + Res **connected**, changing any number will change ALL the

others. Connect or disconnect these settings as needed. Remember, you are moving pixels between these three 'variables': Think of this **relationship** like having three pools of water (pixels) all connected by a big pipe. 20 people jump into one pool and the water in that pool goes out (lowers) and pushes water into the other pools where the water goes UP!



3) Change "**Dimensions**" to optimize your flattened image:



A. This is the **physical dimensional** size of the image.

NOTE: Optimize your image to a dimensional size close to what you need. I often use about 20% larger than what I think I need. This gives me a little extra size just in case I want to make the image larger and maintain quality.

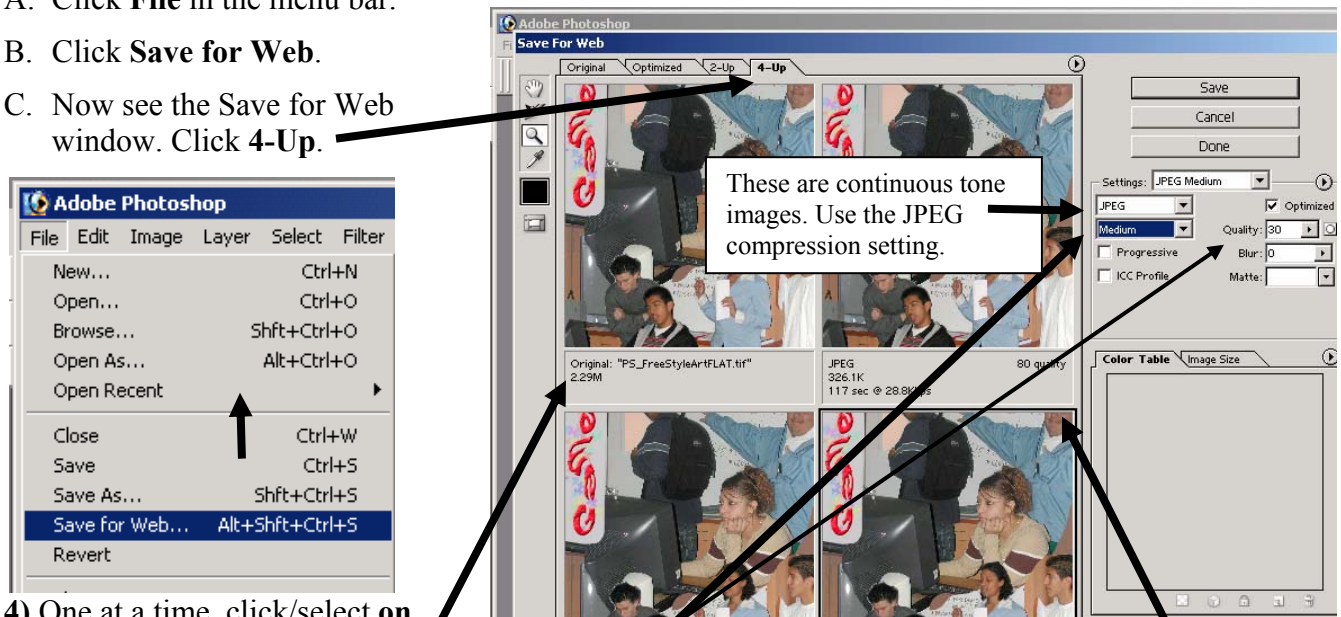
To check/change the dimensions: 1) Click Image (in menu bar) and then click Image Size. 2) See the link. This connects/constrains the Width to the Height. If you do not see this connector, check these boxes until you see the link. Change these variables only as needed. Observe your results.

Without Res connected: Lowering Res throws pixels away. Increase Res and Photoshop has to MAKE new pixels with lower quality than the original ones you threw away. How 'bad' will the image look? Quality depends on the image and how many pixels you are have Photoshop make. Use the original pixels for best quality. But if needed, Photoshop will do its best to try to make new pixels for you.

4) Choose your file “Compression” setting and get the smallest file size with the maximum acceptable quality.

In this procedure you lower your file size by “squeezing” pixels out of your image. This is sort of like squeezing water (pixels) out of a sponge (your image).

- A. Click **File** in the menu bar.
- B. Click **Save for Web**.
- C. Now see the Save for Web window. Click **4-Up**.



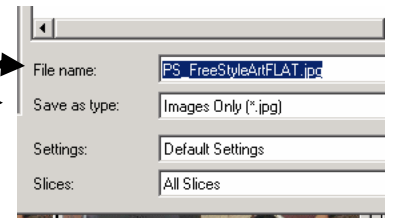
4) One at a time, click/select on each of the 3 images (not the “Original”) and change the compression (quality) settings. The black box around the image tells you it is selected. Compare the “Original” image (best quality) to the image you changed. Try different settings for the 3 images. Experiment. Watch file size and quality carefully.

5) Choose the **smallest file size with the **best** image and click **Save**.** The SaveAs dialog box opens. Change name to preserve your Original.

6) Choose **Images Only.**

7) Navigate to your work folder where you want to park your image.

8) Click **Save.**



Mr. R’s Fabulous Optimization Formula

Remember FDR (no not the President) – change any of these three things and you change your image.

F File size

D Dimensional size (height and width)

R Resolution size (number of pixels horizontal and vertical)

Gif or JPEG? “General Rule”

Make a copy (SaveAs) of your original before starting to work with your images. With the image saved you can always go back to the original and make another copy and start over if necessary.

On the copy of your original image, work in: 1) layers 2) use layer masks 3) use adjustment layers to protect your work. Save often. When you flatten the image, change its name to preserve your layers.

Have fun! **Need answers** after class? 1) Hit the F-1 Key 2) Library Tutor time 3) Lunch time 4) e-mail me at: pruez@palomar.edu