Photoshop Printing Demo
For Screen Printing

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Version: 3/3/18 Printed: 5/16/18

1. Download photo files to computer (printing stations)
2. Drag files onto “desktop” (do not print files from your external hard-drive or USB drive)
3. Open photos in Adobe Photoshop
4. If you make alterations to your image, save them before printing.

Photoshop Printing Demo
For Screen Printing

Part 1: Prep your Image

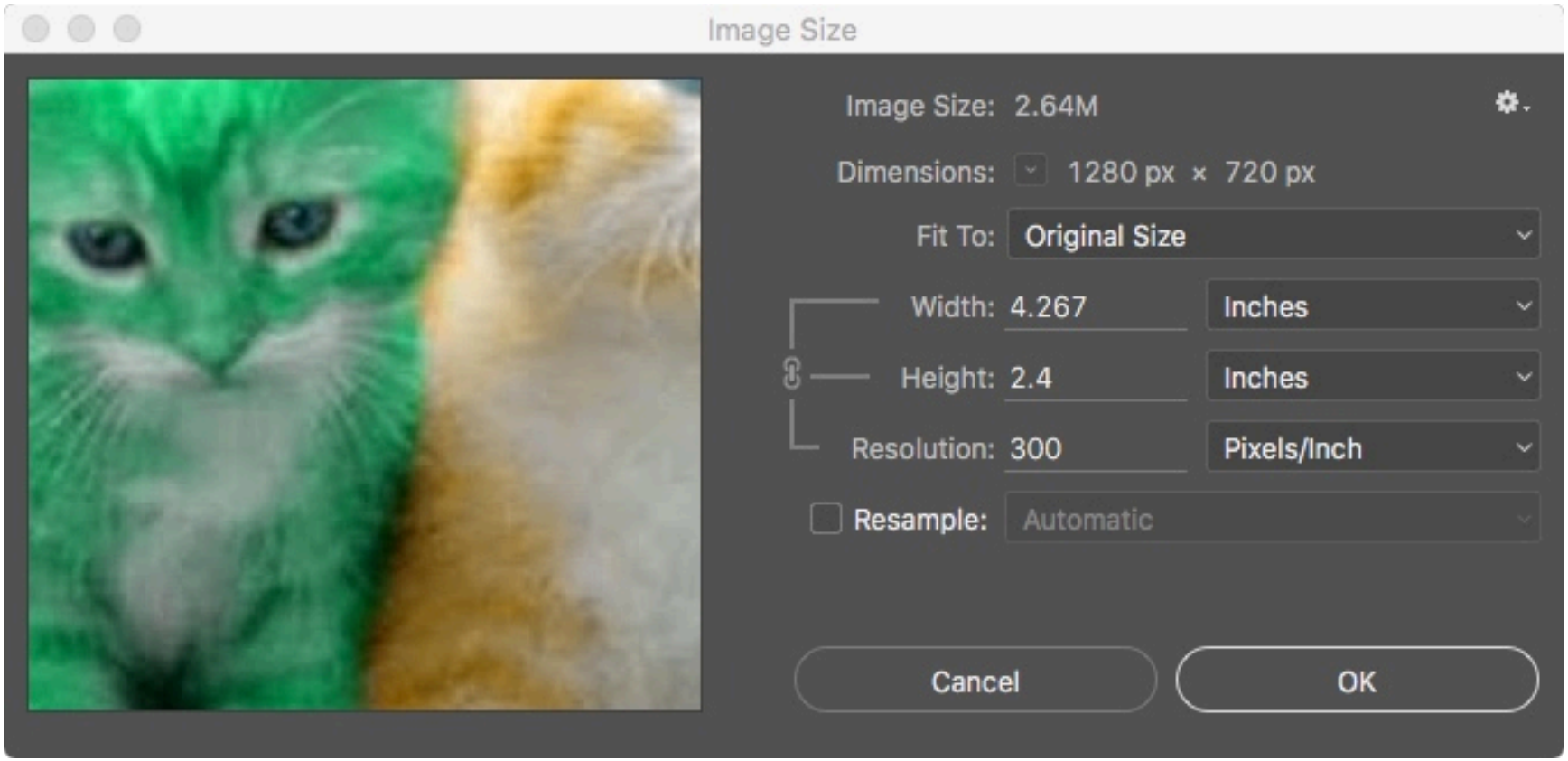
Size the Image

Scroll under “Image” > Select “Image Size”

The “Image Size dialog box” will open automatically
Study the height and width
Ideally your image will be the size in inches you want to print and 300 DPI
Change it as needed (next slide)

NOTE: The printer width is only 17 inches if you print without borders, but the height can be longer. If you need to rotate your image to accommodate the printer size, then you can rotate it in Photoshop or at the time of printing.

If the height and width seem appropriate, then remember these sizes to make a custom-sized print and click the “OK” button.



TO CHANGE THE IMAGE SIZE:

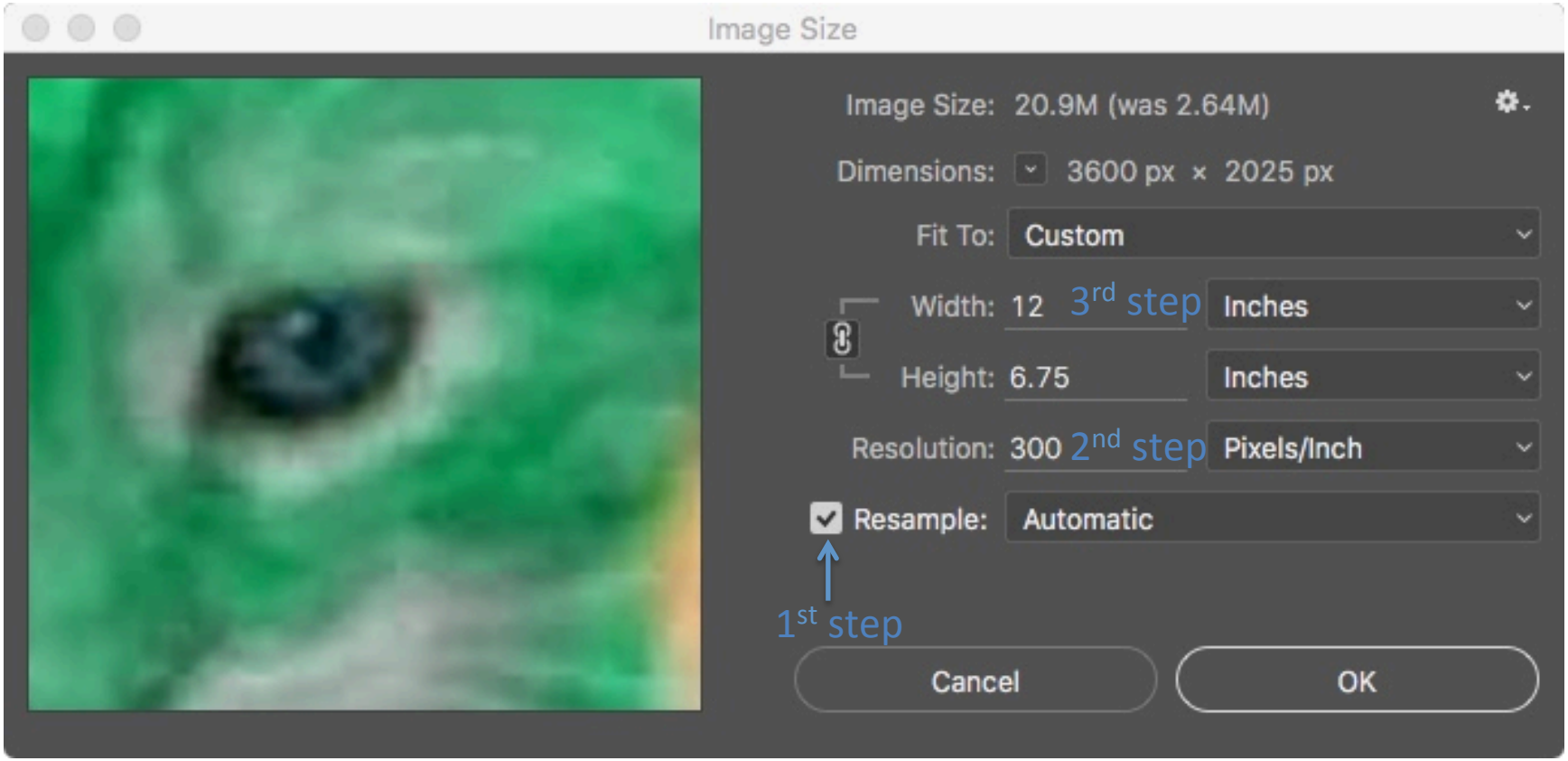
NOTE: If you are planning to convert to a halftone pattern, then you can "upsample" your image without much quality loss (this means making the size or DPI larger). If you are NOT planning to use a halftone pattern, then any "upsampling" will result in loss of quality.

1st step—Check the box "Resample Image"

2nd step—Change the resolution to 300

3rd step—Then change the width or height to the size you need. Changing one value will change the other value and also the resolution.

Remember these sizes to make a custom-sized print and click the "OK" button.



Photoshop Printing Demo
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Part 1: Prep your Image

Split Layers for CMYK process printing

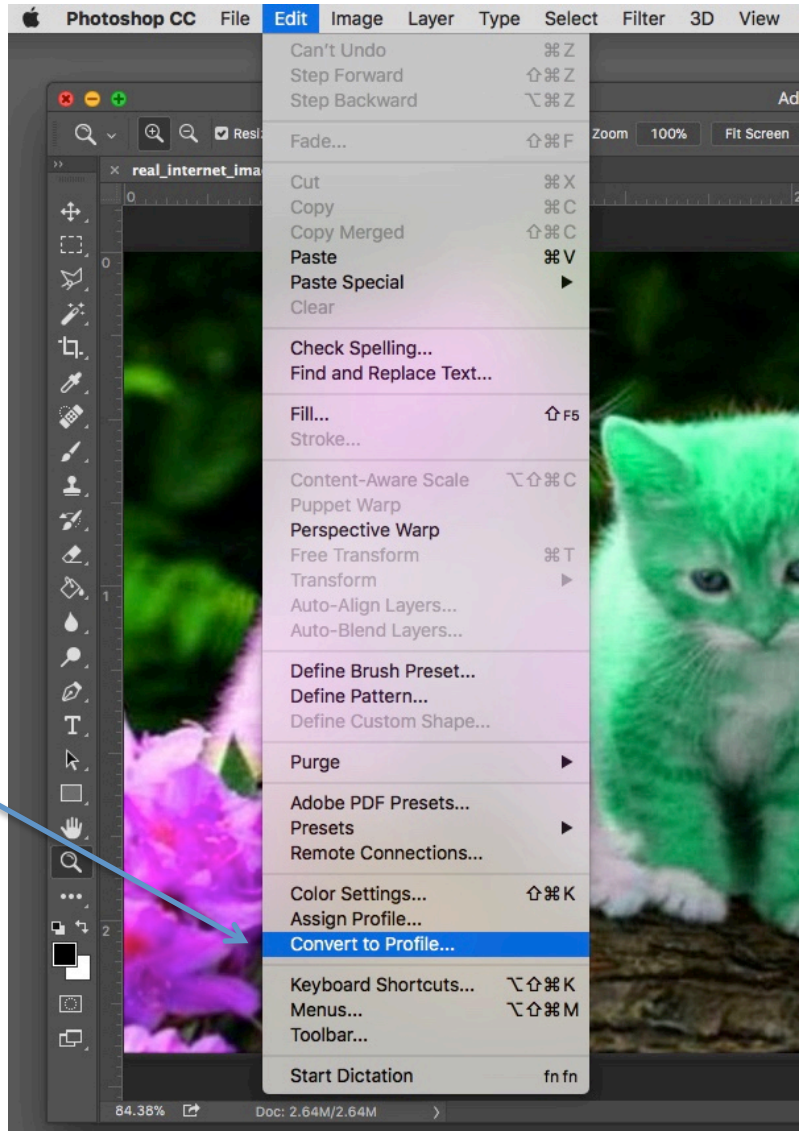
NOTE: If you are not using CMYK process, skip to "Create Gray-Scale Files"

If your image is RGB, it will need to be converted to CMYK

Scroll under “Image” > Select “Mode” > Select “CMKY Color”

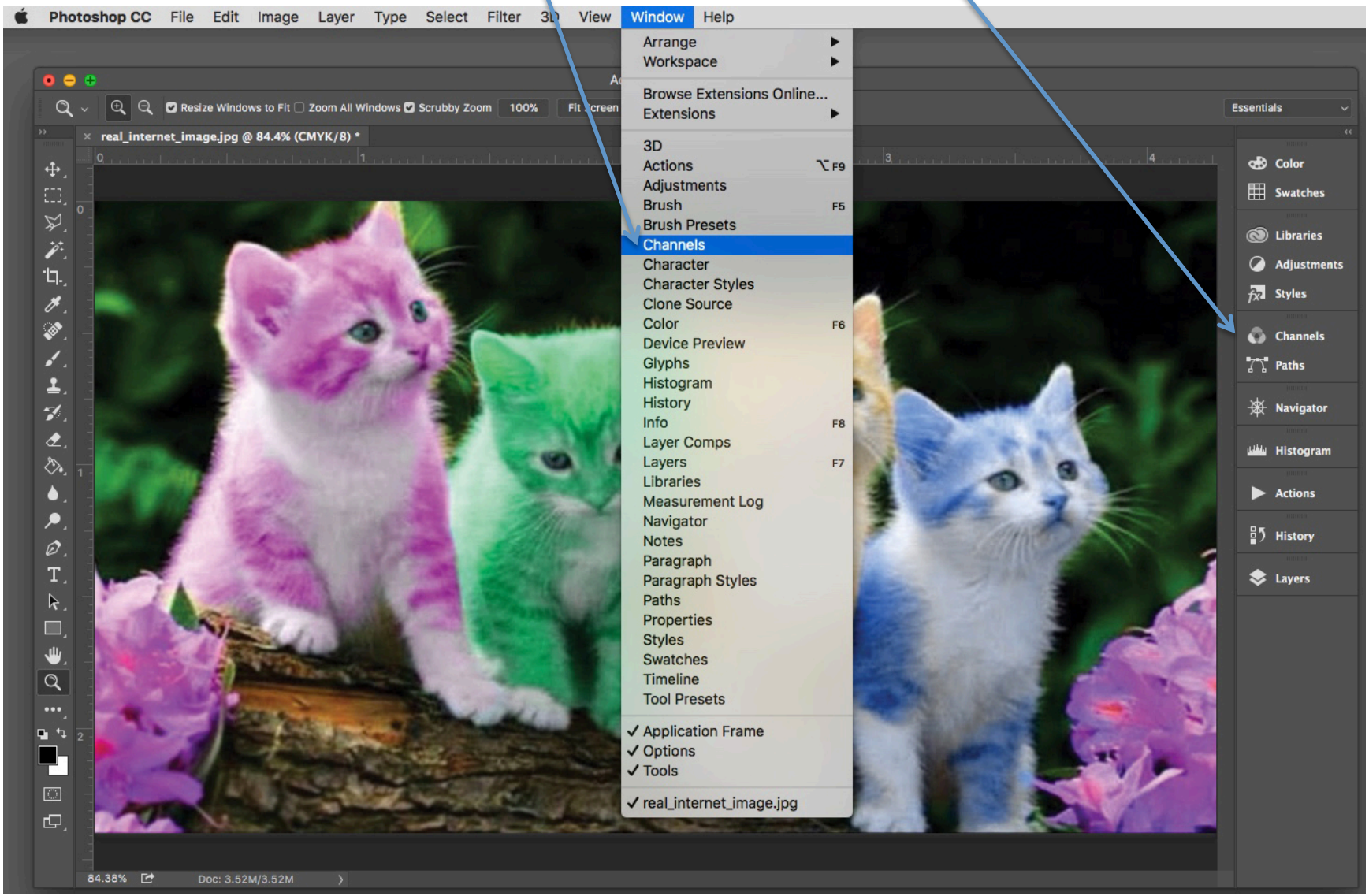
Click “OK” on warning

NOTE: If you want the ability to customize your CMYK settings, you may choose to convert to a different profile.



Once converted to CMYK, open up your channels pallet

To find the channels pallet, look in your “Pallet Well” on the right-hand side or scroll under “Window” > Select “Channels

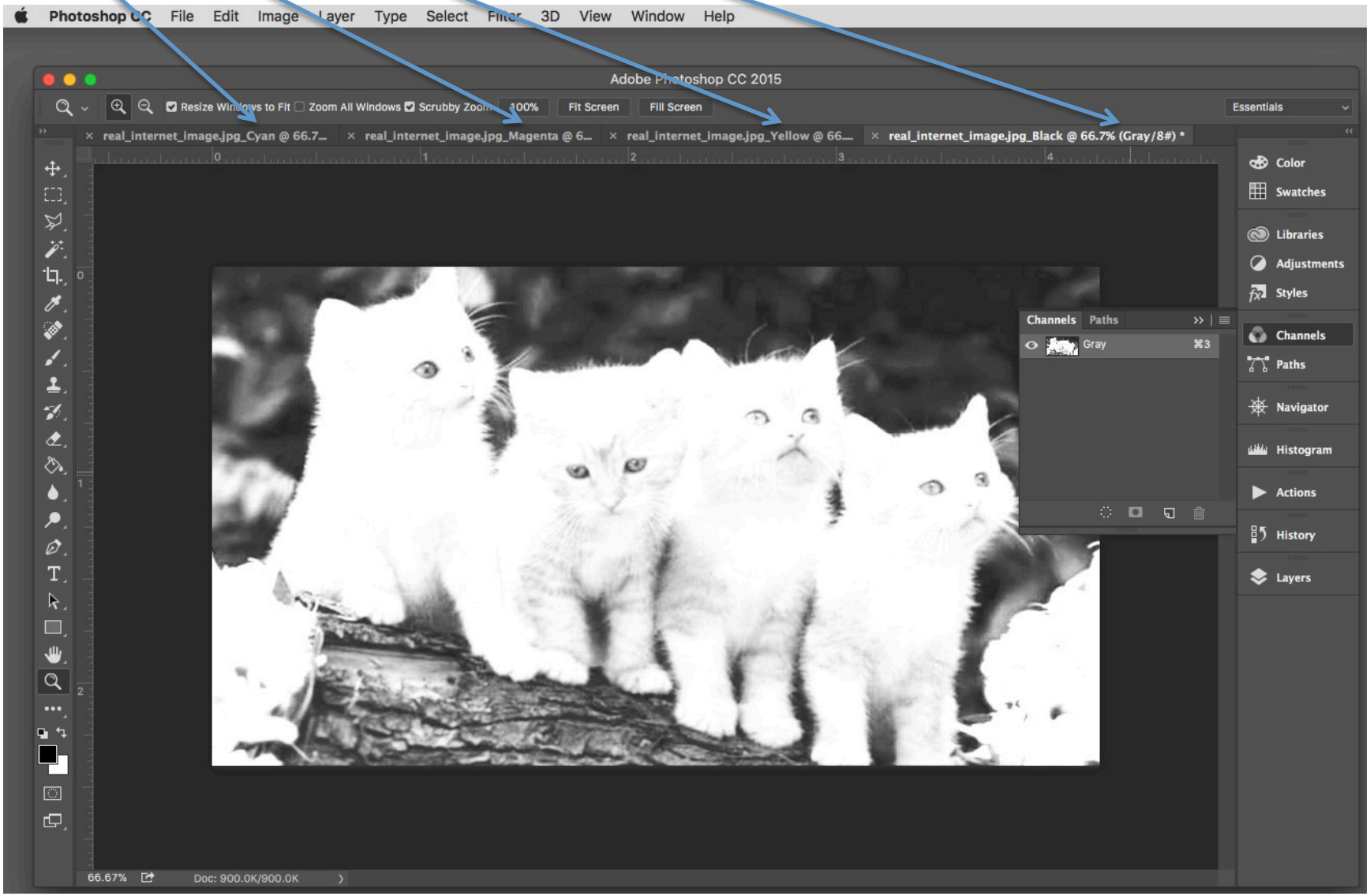


Your channels pallet will split each process color onto its own channel

Go to the options button on the side of the menu (looks like 3 lines)
Hold down the button
Select “Split Channels”

NOTE: once you split channels you cannot easily go back to your prior multi-channel image, so save first if needed.

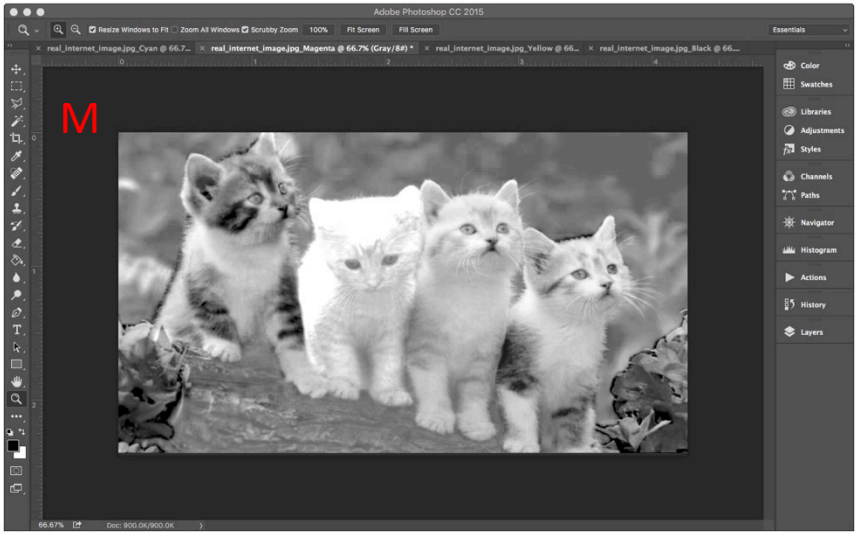
Your image is now split into four separate files, one for each of the process colors: Cyan, Magenta, Yellow, and Gray

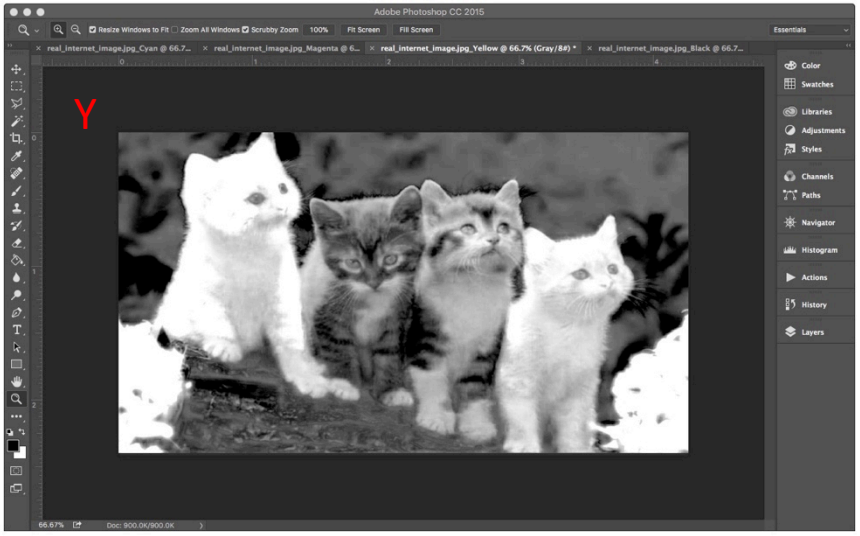


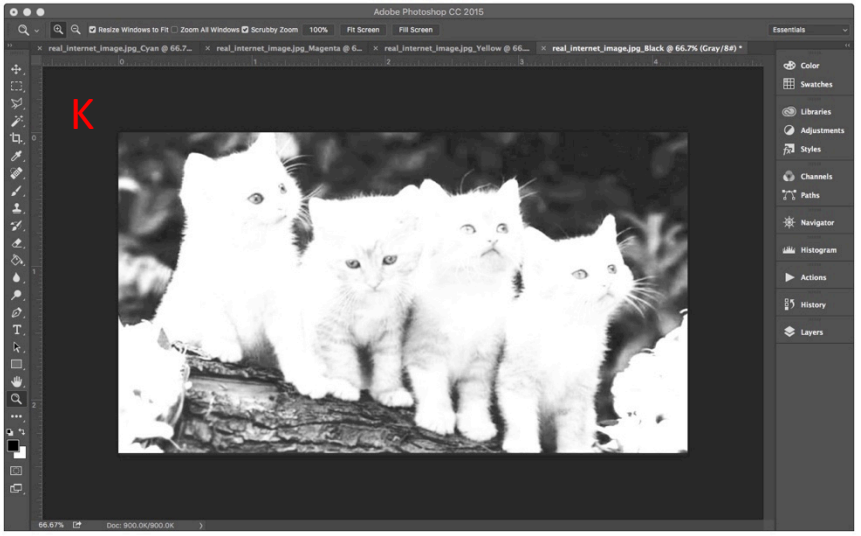
The files should look somewhat different, and some may be nearly blank depending on your original image.

NOTE: If you have a nearly blank image you may want to consider printing with 3 colors instead of a true 4-color process.

You are ready to convert to halftones.







Photoshop Printing Demo
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Part 1: Prep your Image

Create Gray-Scale Files

NOTE: This section is not needed if you followed the "Split Layers for CMYK process printing" section of this guide.

Scroll under “Image” > Select “Mode” > Select “Grayscale”

Photoshop Printing Demo
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Part 1: Prep your Image

Create Halftones from Gray-Scale Images

Scroll under “Image” > Select “Mode” > Select “Bitmap”

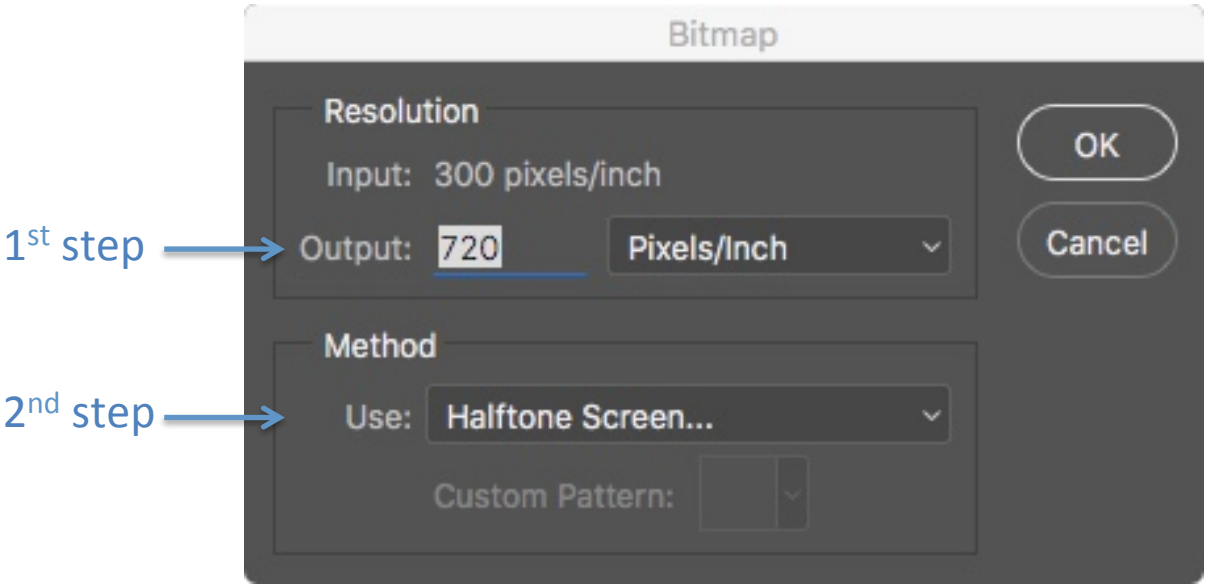
NOTE: If your image is not in Grayscale mode it will not give you the option to convert to Bitmap.

The “Bitmap dialog box” will open automatically

1st step—Set the “Output” to 720 (pixels per inch)

2nd step—Set the “Method” to Halftone Screen

NOTE: If you want a different look, Diffusion Dither is also an appropriate method.



The “Halftone Screen dialog box” will open automatically

1st step—Set the “Frequency” (often referred to as lines per inch or LPI) according to your screen mesh count. LPI = screen mesh divided by 5

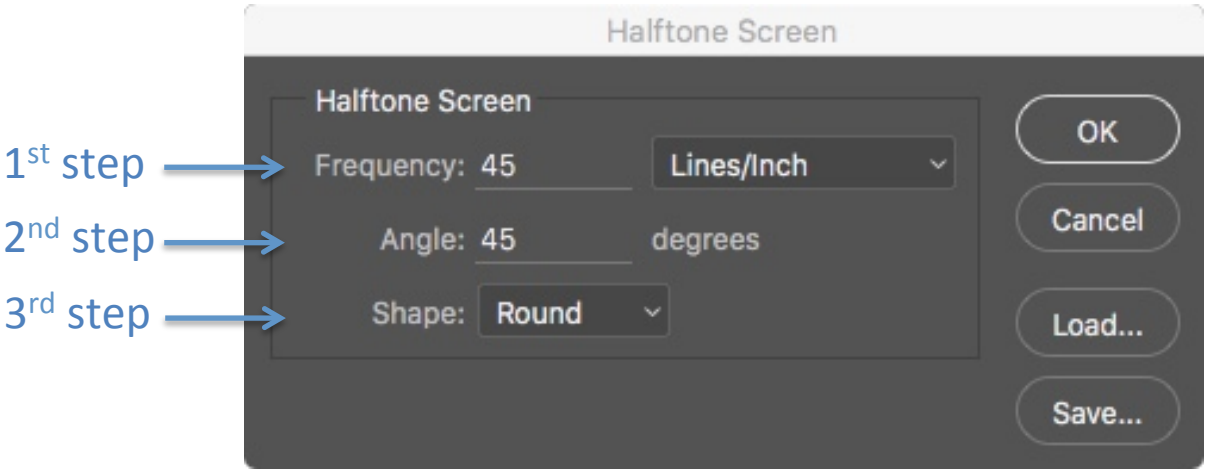
NOTE: 195 mesh is 39LPI,
230 mesh is 46LPI,
if you don’t know the mesh count 45 is a good number to choose

2nd step—Set the “Angle” of the halftone pattern depending on your use.

NOTE: If you are not using a mixing process like CMYK, any number you choose will work. 45 and 22.5 are the most common choices.
If you are using the CMYK process, the most common angles are as follows: C=75 M=15 Y=0 K=45

3rd step—Choose the shape of the halftone “dot”

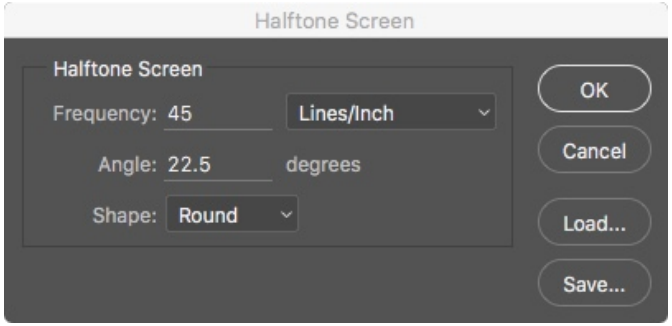
NOTE: Round and Elipse are the most common.



More information from the last slide

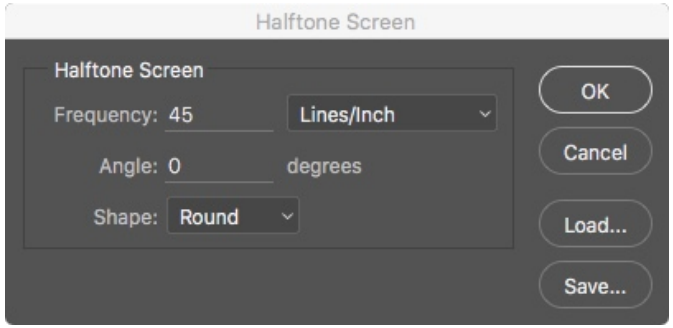
2nd step—Set the “Angle” of the halftone pattern depending on your use.

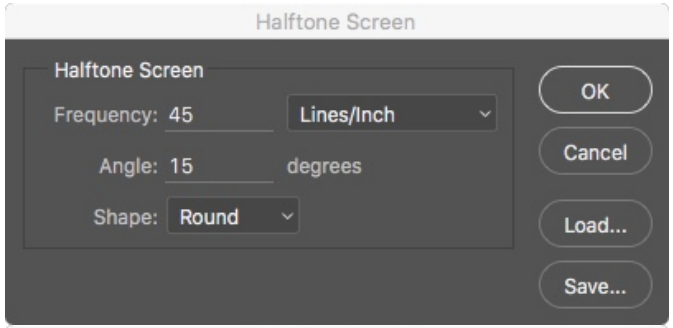
If you are not using a mixing process like CMYK, any number you choose will work. 45 and 22.5 are the most common choices.

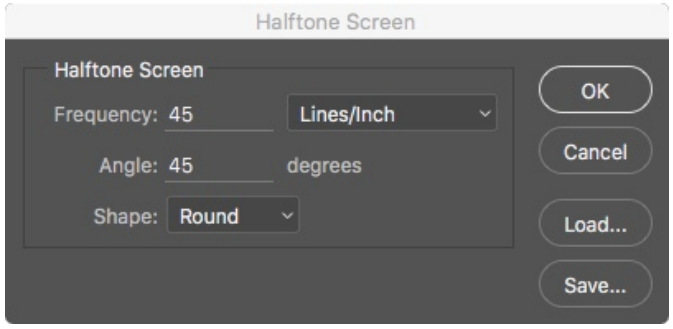


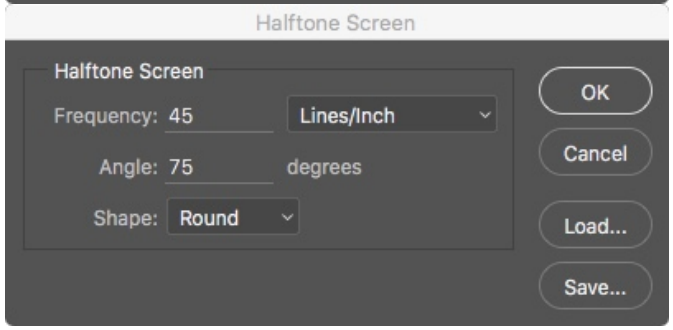
If you are using the CMYK process, the most common angles are as follows:

C=75
M=15
Y=0
K=45





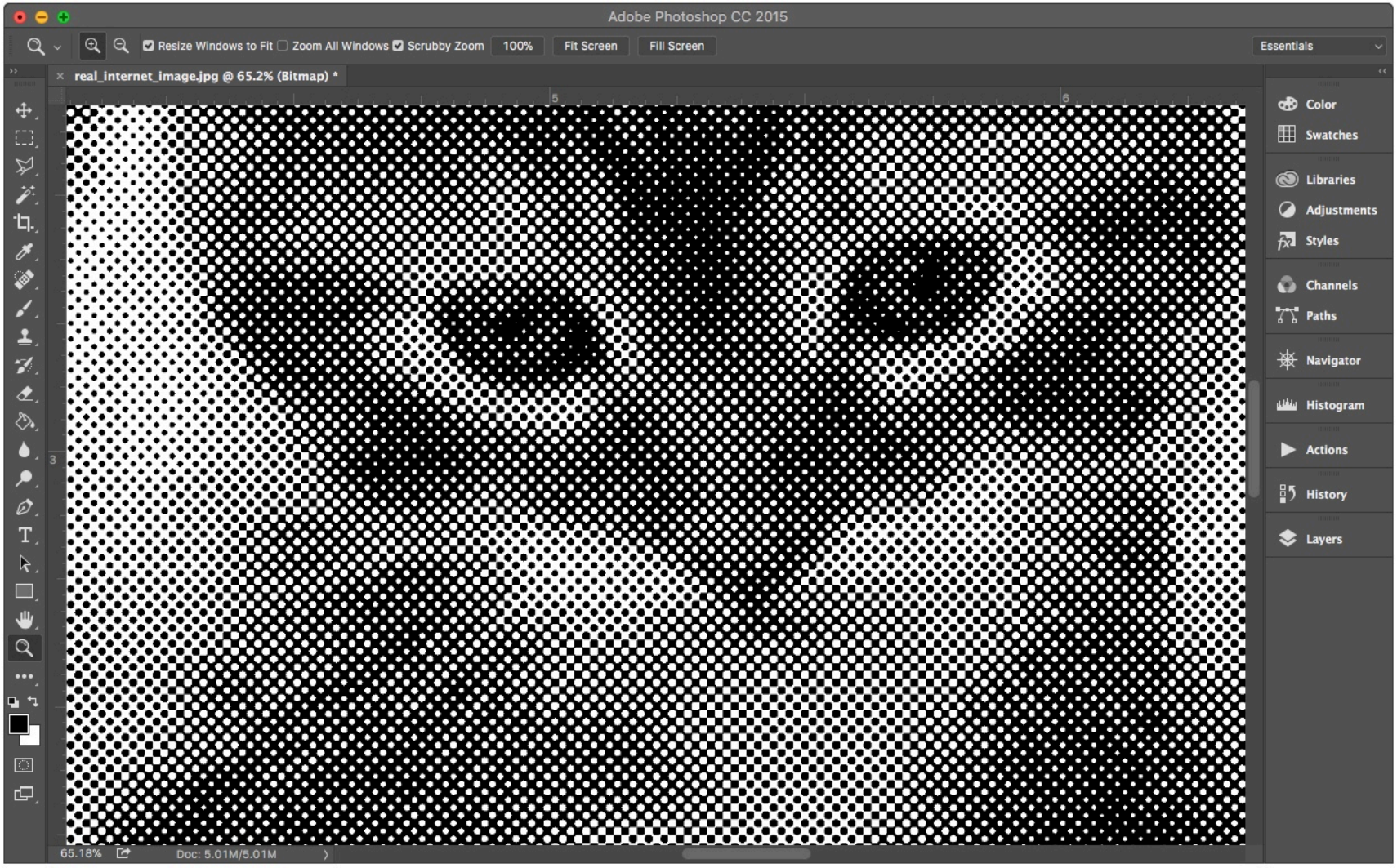




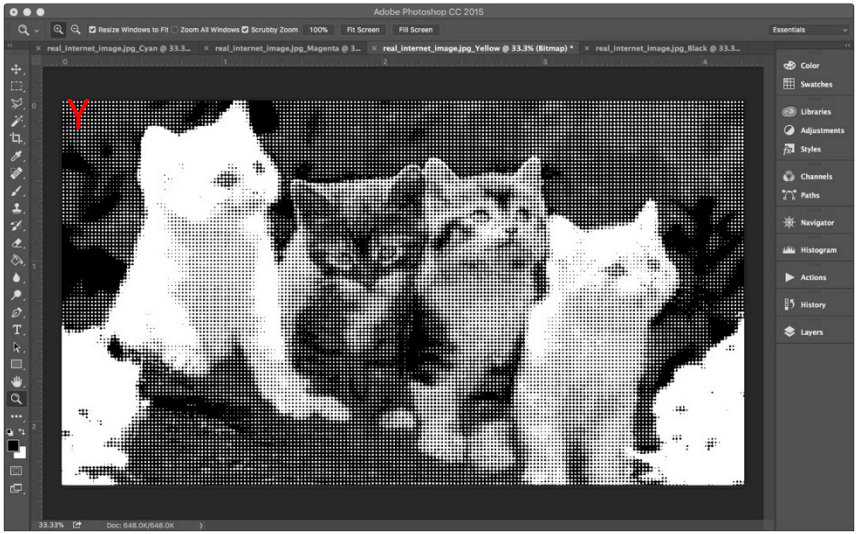
The image is now in halftone and ready to print.
Print without AccuRIP (since the files are already in halftone) but with custom page sizes.

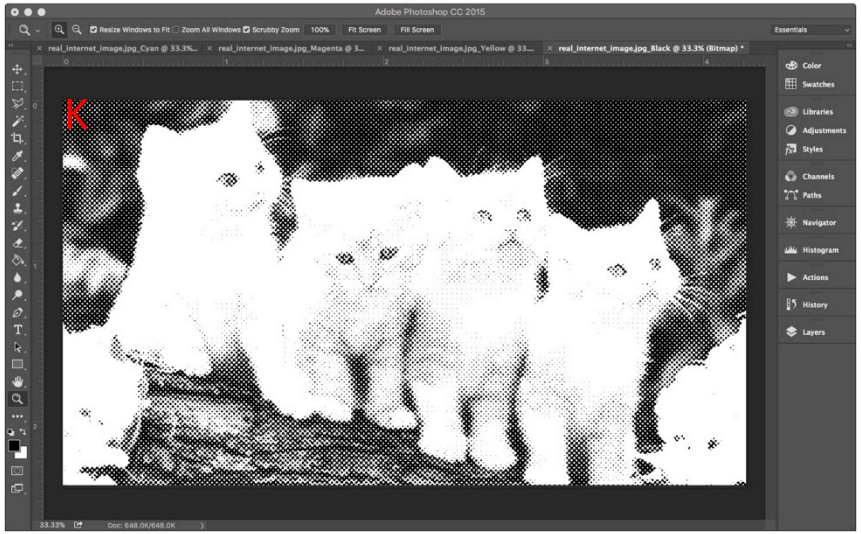
Detail of halftone

You should be able to see distinct dots in the digital file and in the printed image.



If you have multiple files, convert each separately with appropriate angles. Print without AccuRIP (since the files are already in halftone) but with custom page sizes.





Photoshop Printing Demo
For Screen Printing

Part 2: Print your Image

Without AccuRIP

1. Download photo files to computer (printing stations)
2. Drag files onto “desktop” (do not print files from your external hard-drive or USB drive)
3. Open photos in Adobe Photoshop

If you made alterations to your image, SAVE your image before you print.

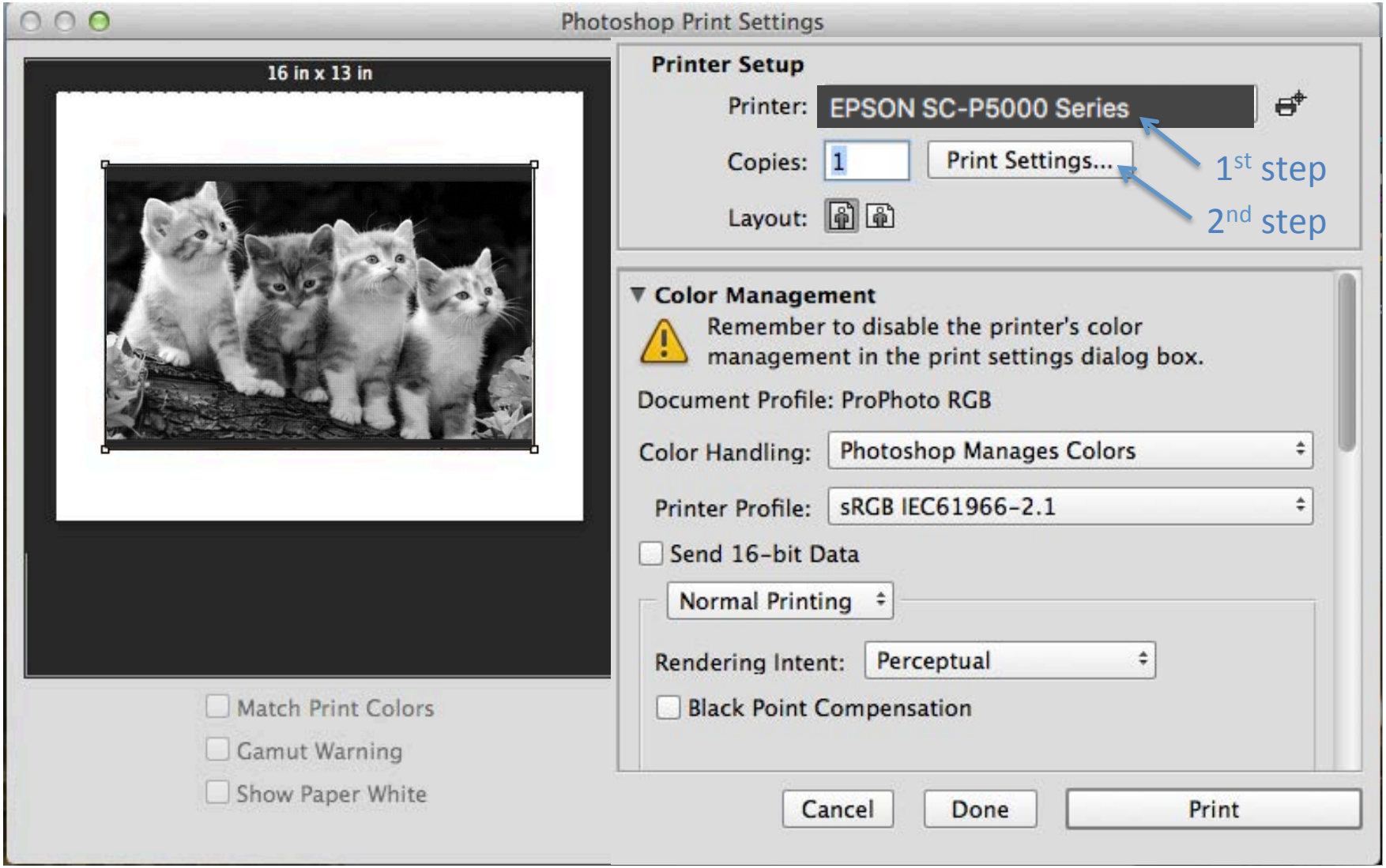
Scroll under “File” > Select “Print”

The “Printer Setup Dialog box” will open automatically

1st step—Select the printer you will be using

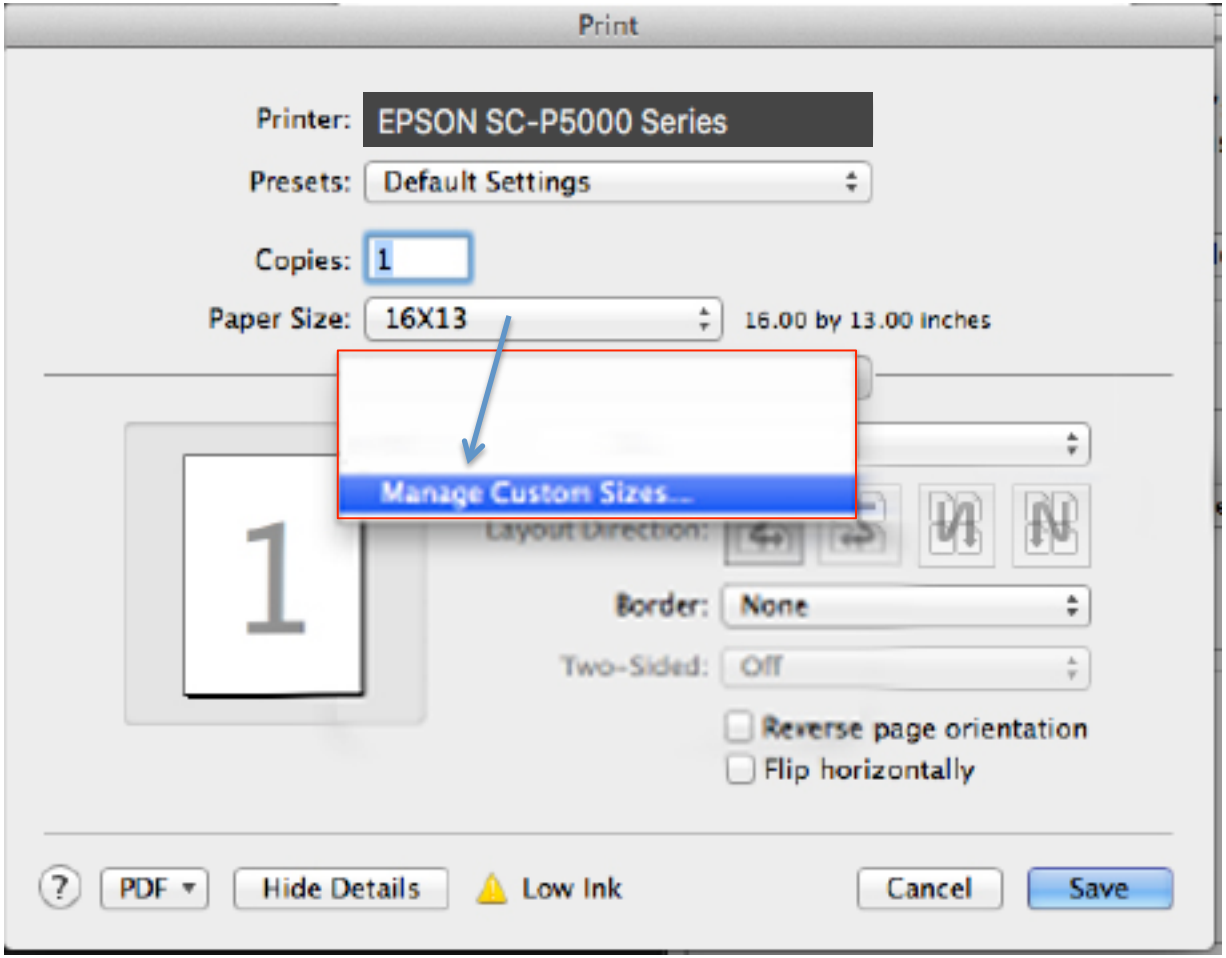
NOTE: use Epson SC-P5000 Series printers (or choose AccuRIP if your image needs a halftone pattern applied during the printing)

2nd step—Click on “Print Settings”



The “Print Dialog box” will open automatically
Click on “Paper Size”
Choose “Manage Custom Sizes” from the bottom of the menu

NOTE: You may choose a preset from the list if it works for your image; the “Manage Custom Sizes” option provides the most options and control.



The “Custom Paper Sizes Dialog box” will open automatically

1st step—Add a new custom paper size by selecting “+”

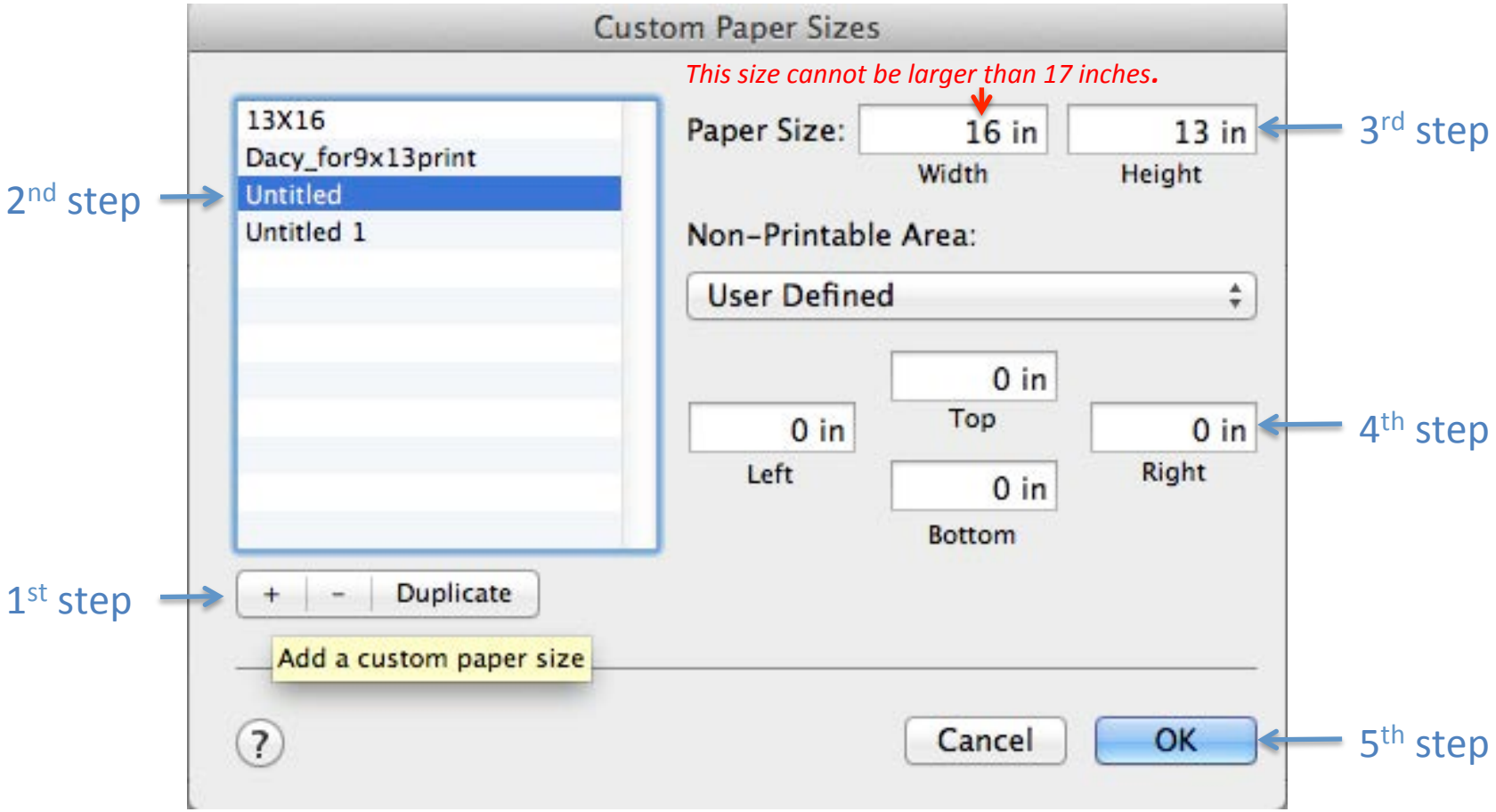
2nd step—Name your custom paper size (with the size you’ve created)

3rd step—Under “Paper Size”, type in the width and height you need

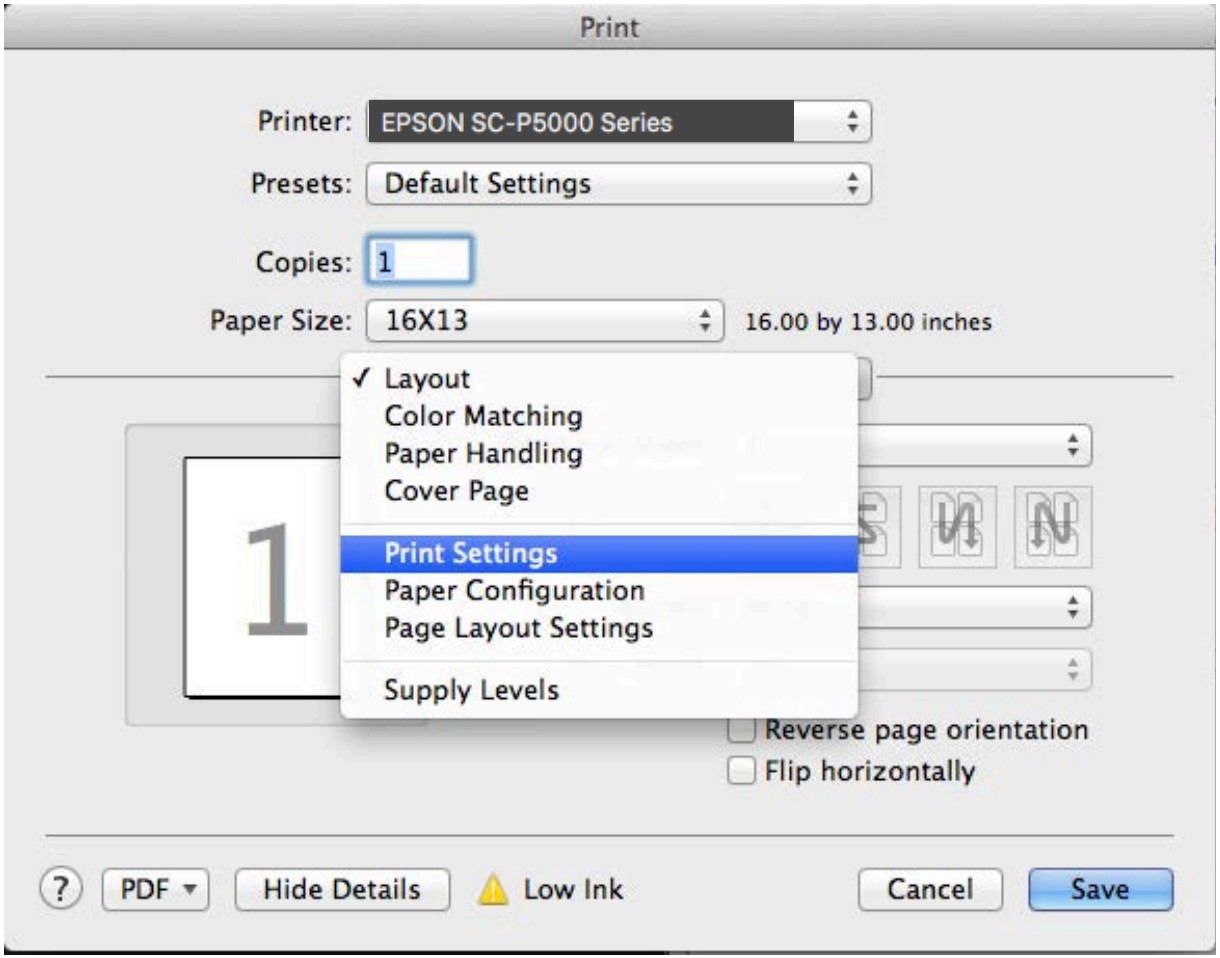
NOTE: The printer width is only 17 inches but the height can be longer. If you need to rotate your image to accommodate the printer paper size, then you can rotate it at the time of printing (see page 12) or in Photoshop before printing.

4th step—Type “0” for all borders

5th step—Click “OK”



After selecting paper size…
Under “Layout” > Select “Print Settings”



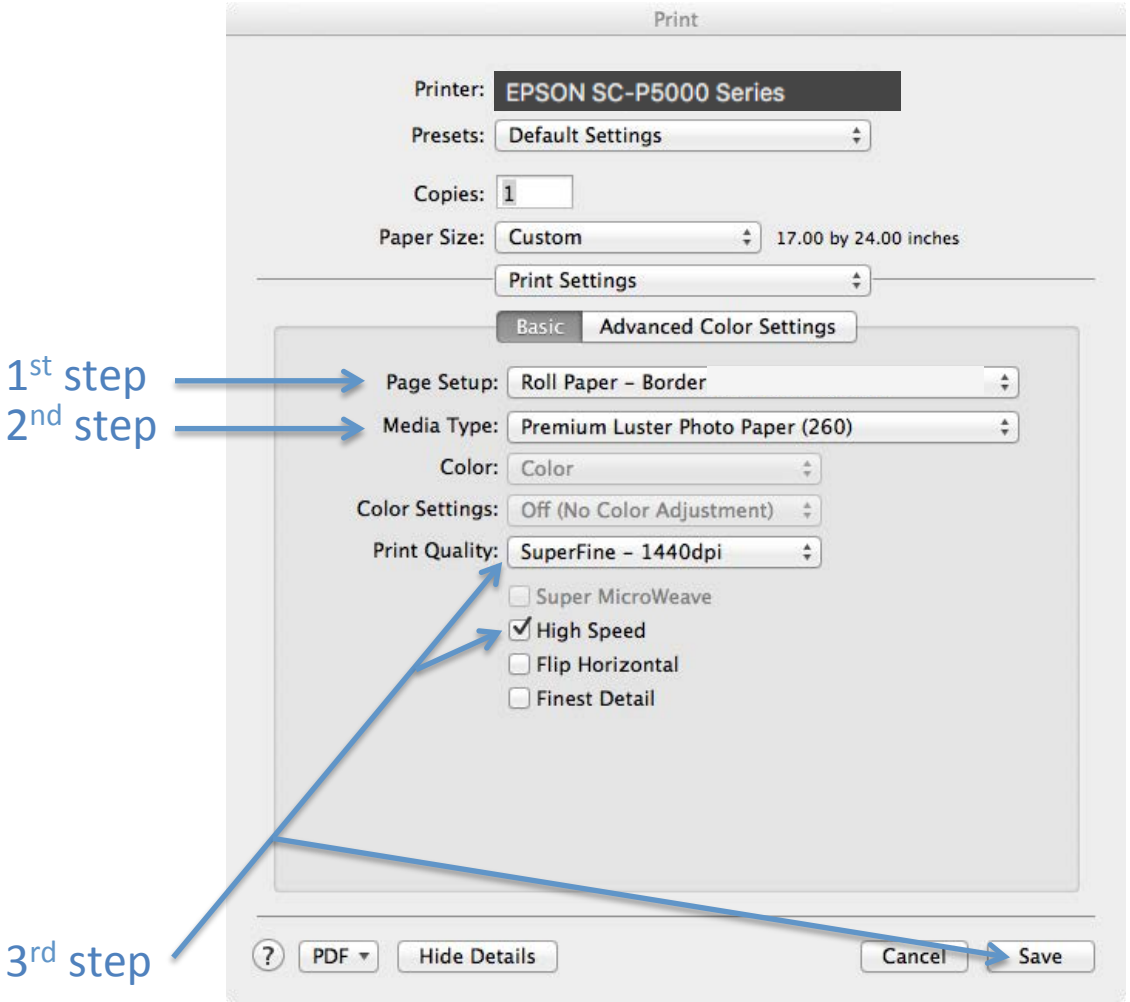
The “Print Dialog box” will show the “Print Settings” menu automatically

1st step—Under “Page Setup” choose your paper source (Roll Paper - borders)

2nd step—Under “Media Type” choose the type of paper you are using

NOTE: The roll paper in AMD labs can be found on the label taped to one of the printers in the room.
This paper can be found under: Photo Paper > Premium Luster Photo Paper (PLPP) #260

3rd step—Double check Print Quality, check High speed, and press “Save”



DETAIL OF STEP 2 IN PRIOR SLIDE

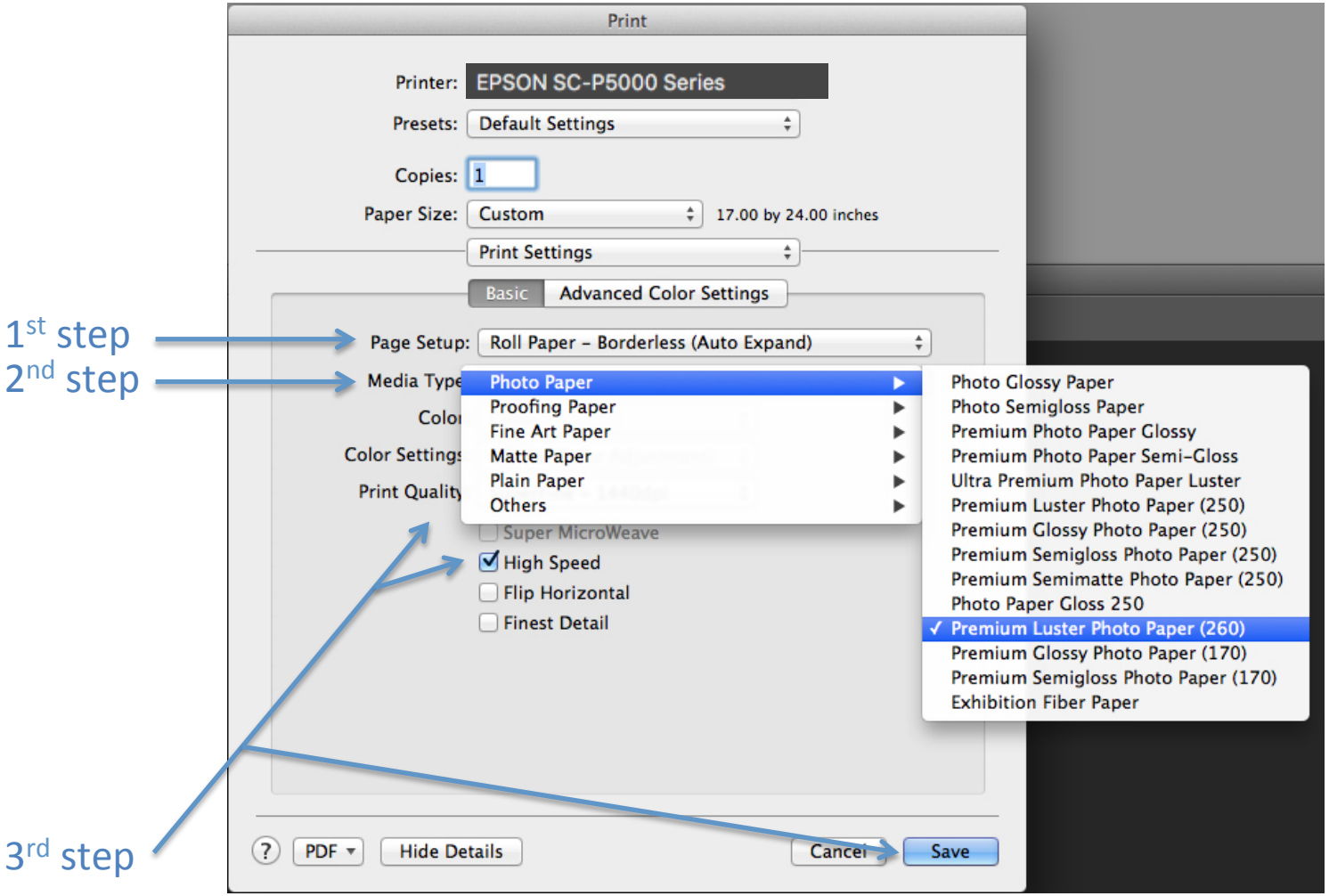
The “Print Dialog box” will show the “Print Settings” menu automatically

1st step—Under “Page Setup” choose your paper source (roll or sheet)

2nd step—Under “Media Type” choose the type of paper you are using

NOTE: The roll paper in AMD labs can be found on the label taped to one of the printers in the room. This paper can be found under: Photo Paper > LLK Premium Luster Photo Paper (PLPP) #260.

3rd step—Double check Print Quality, check High speed, and press “Save”



The “Print Setup Dialog box” will open automatically

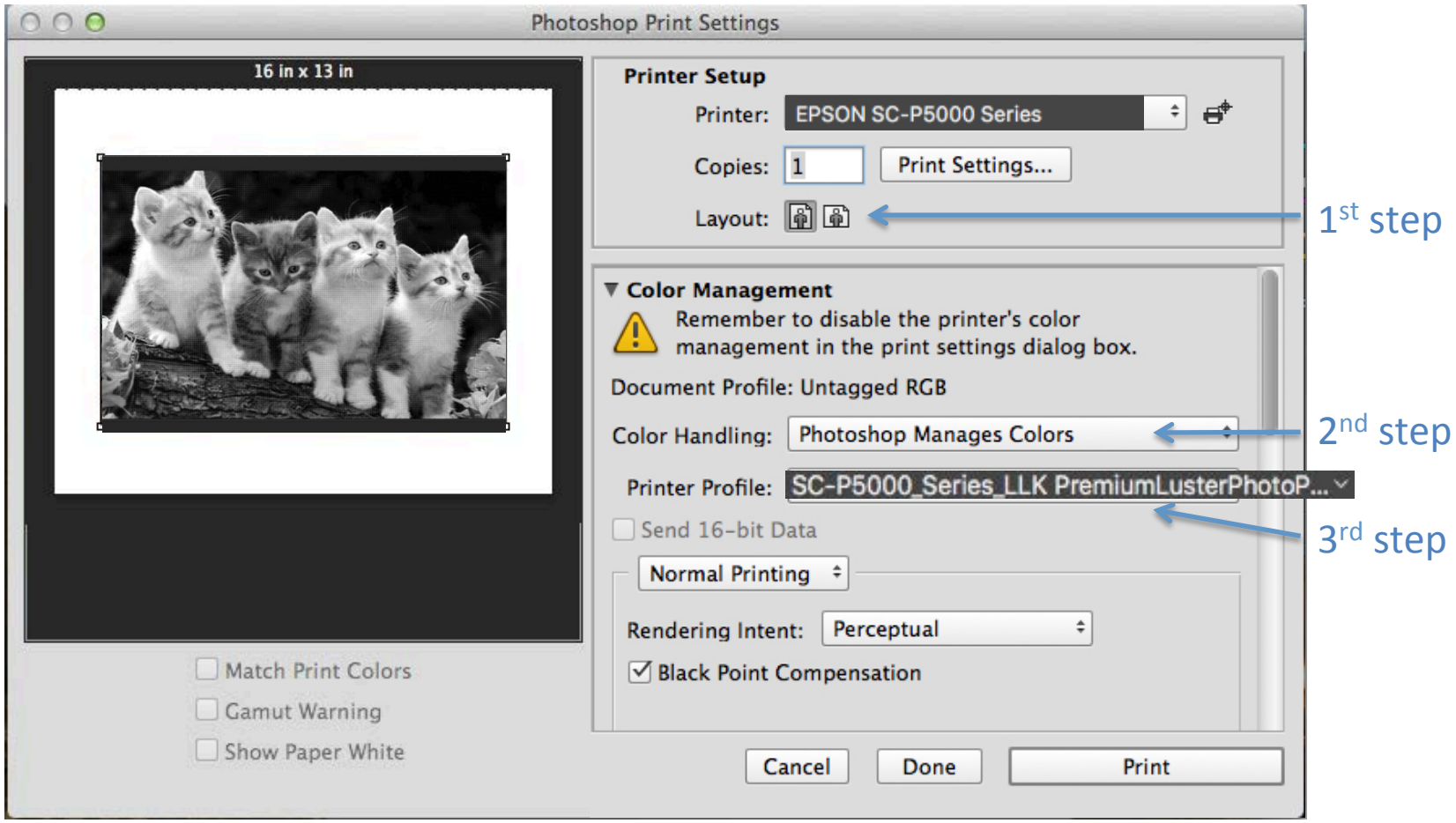
1st step—Change the orientation of your image as needed

NOTE: at this point the thumbnail of your image and border should look correct. If it does not, it will not print correctly.

2nd step—Under “Color Handling” > Select “Photoshop Manages Colors”

3rd step—Under “Printer Profile” > Select your paper type again

NOTE: This ensures that the inks are set to your paper type. (AMD roll paper: SC-P5000 series LLK Premium Luster Photo Paper 260)

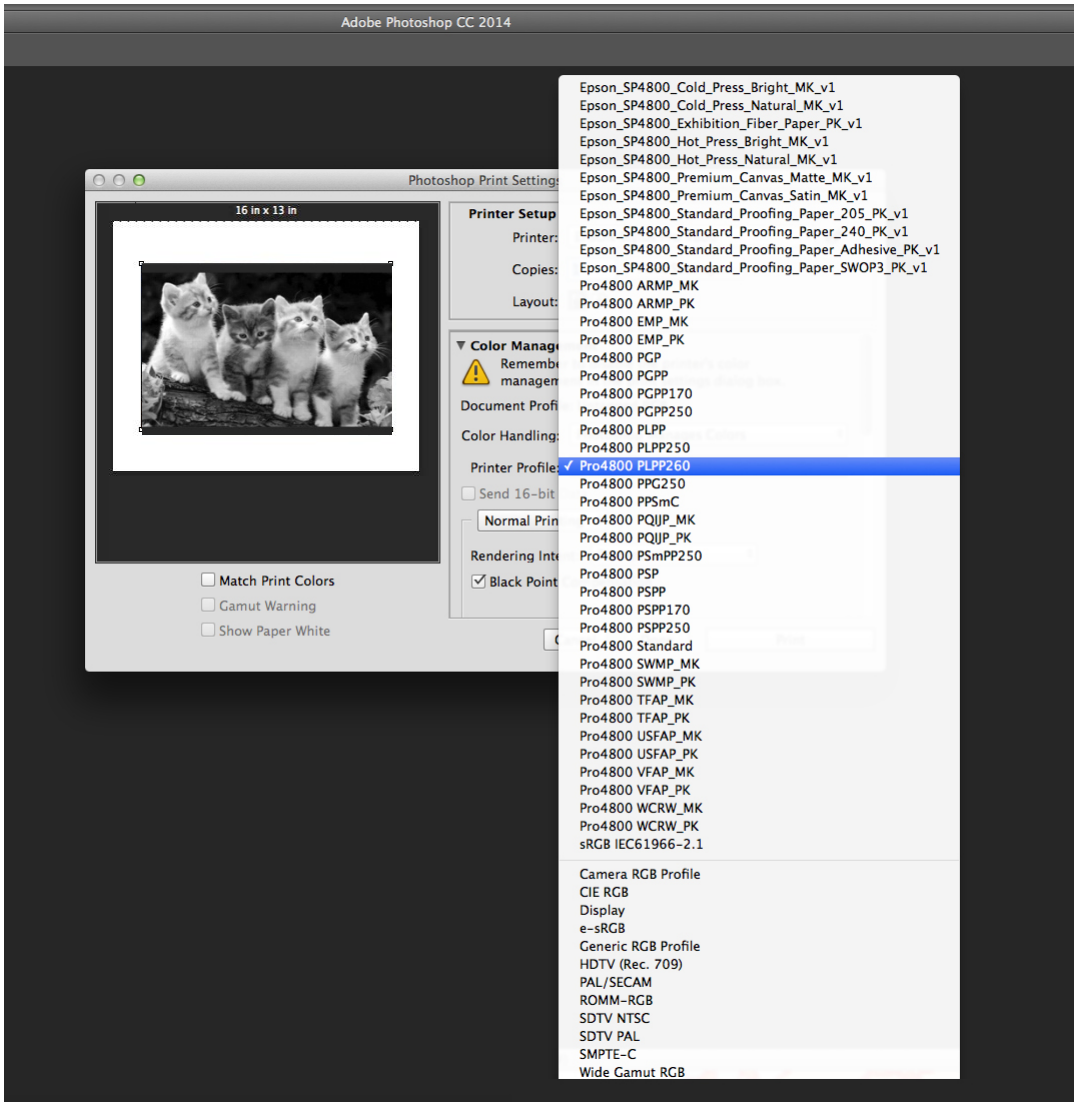


DETAIL OF STEP 3 IN PRIOR SLIDE

Select the type of paper you are using

NOTE: The roll paper in AMD labs can be found on the label taped to one of the printers in the room.
The paper is labeled by printer (SC-P5000) then paper type (Premium Luster Photo Paper or PPLP) then number (260)

Click “Save”



Continuation…

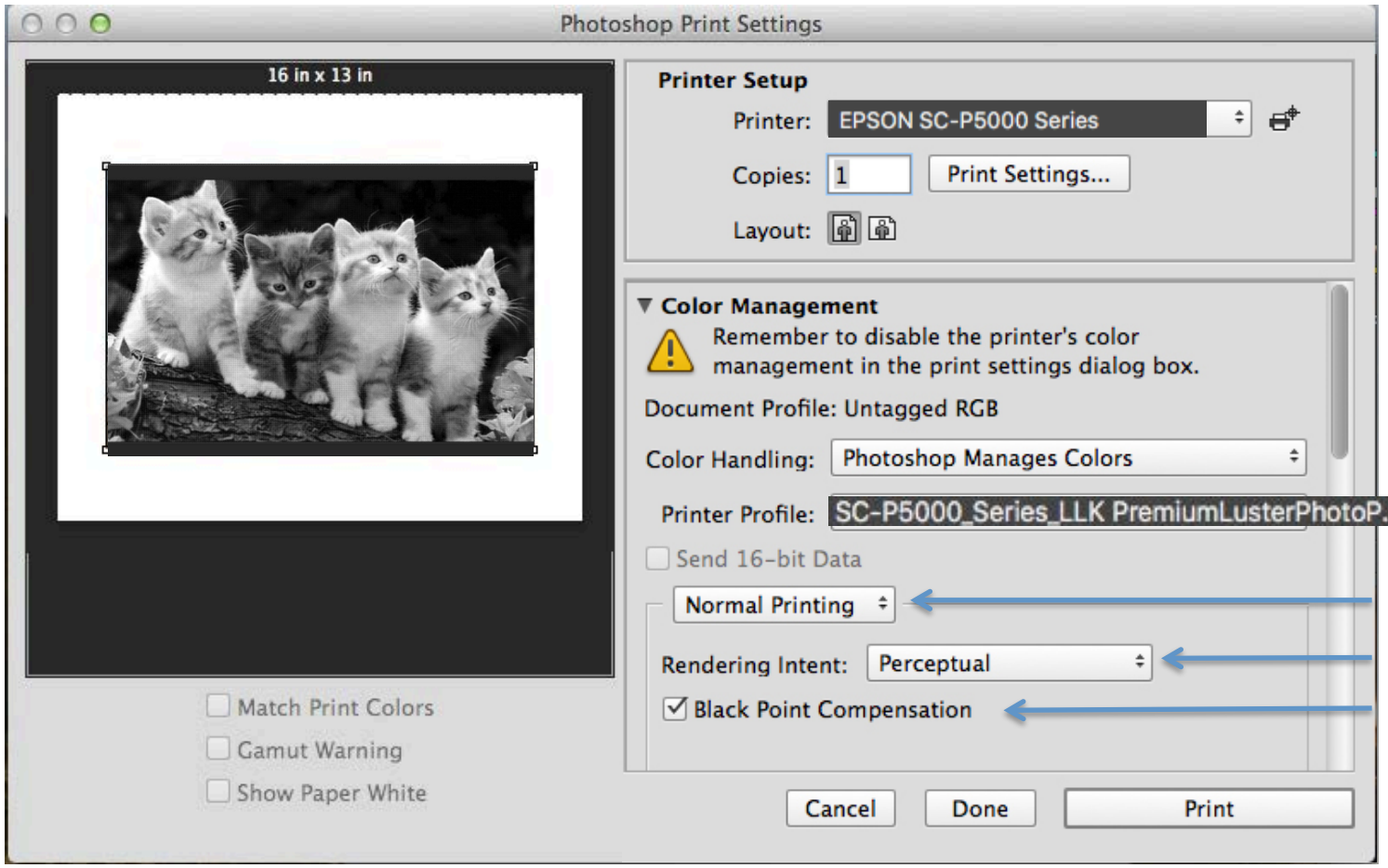
4th step—Choose “Normal Printing”

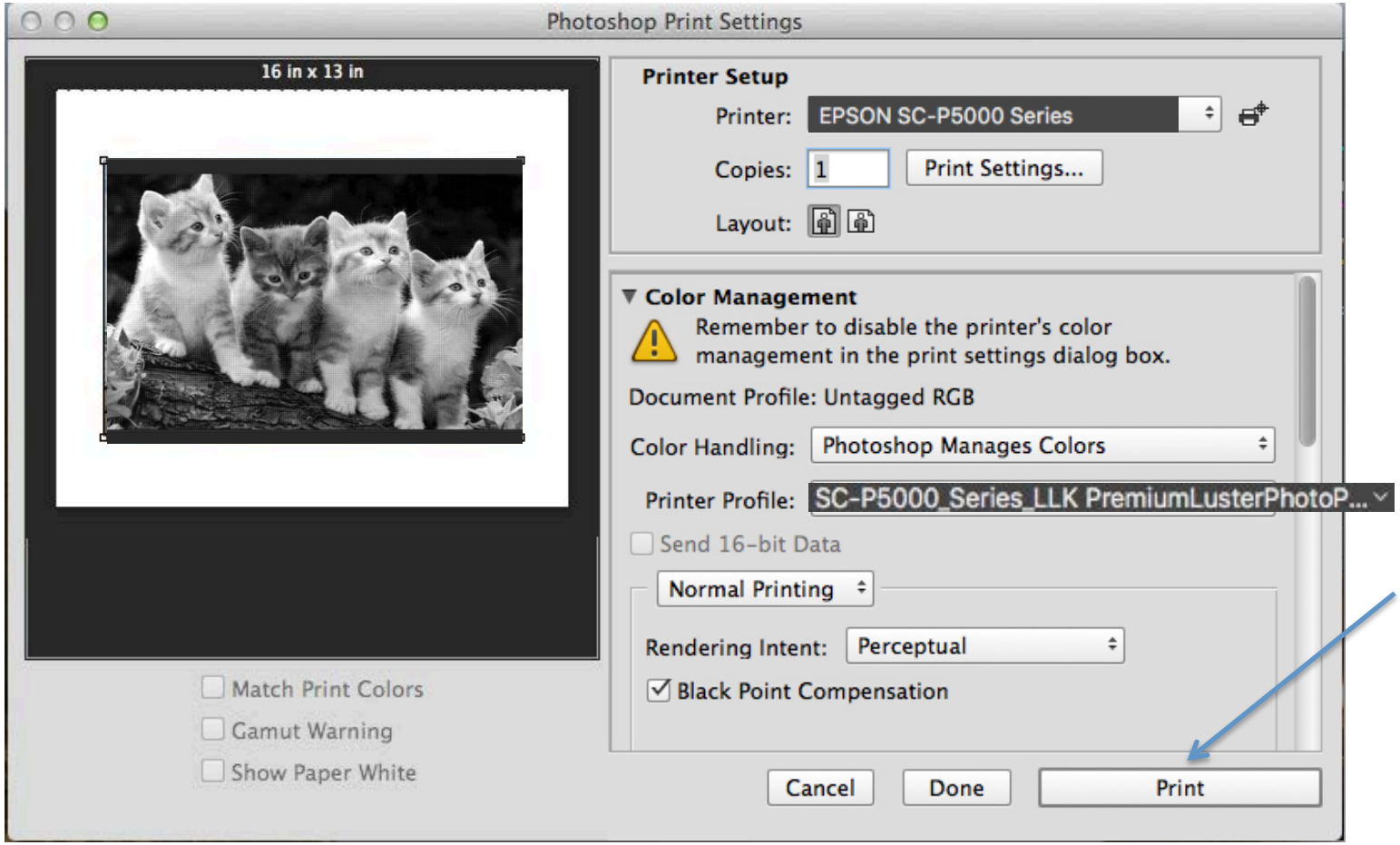
5th step—Under “rendering Intent” > Choose “Perceptual”

NOTE: The “Perceptual” setting is a good place to start. Over time you may choose different options depending on your image.

6th step—Check the box for “Black Point Compensation”

NOTE: Using “Black Point Compensation” is a good place to start. Over time you may not use it depending on your image.



Continuation…

Print!