

1. Supposing you are a graphics software designer. You have the following three requirements for your software:
 - the program should provide an onscreen WYSIWYG image editor
 - the color manipulation should be intuitive for artists to use
 - the program should be able to print out high quality archival images

Which color system would you use for each aspect of your system. Give your reasons for your choice or choices. [3pts]

2. Describe how you would construct an image similar to the one below but without the Mach banding effect. (*Hint:* to verify if the desired effect was achieved, you could use a drawing program to create the image according to your description). [2pts]



(Quiz continues in the next page)

3. Give the associated colors for the following pixels labeled A and B, specifying all numbers as integers. Here, we assume assume 8 bits per color channel. **[2pts]**

Color A

120	240	60	100
R	G	B	A

Associated Color

R	G	B	A

Color B

100	100	240	200
R	G	B	A

Associated Color

R	G	B	A

4. Given your associated colors for pixels A and B above, give the composite associated color pixels A over B, and B over A. **[3pts]**

A over B

R	G	B	A

B over A

R	G	B	A