

Chapter 7 Worksheet G

Advanced skills.

1. Make a 200x400 vertical gradient from pure blue to LightSeaGreen.
2. An unusual transformation: take a picture and make it "reverse grayscale" using only the green and blue components to decide how much gray to include. (Average to combine.) Reverse grayscale means lots of color should produce a dark shade of gray, not light.

Example: (make-color 50 100 250) has green=100 and blue=250, so the average amount of color is $(100+250)/2 = 175$. In grayscale this would be (make-color 175 175 175), but reverse grayscale would use $255-175=80$ for each, so (make-color 80 80 80).

3. Make a red circular gradient in a 500x400 window. The color should change from all red in the center to completely white when you are 150 pixels from the center point (250,200).
4. Animate your gradient from the part above. The distance of the mouse from the center (250,200) controls how long it takes the gradient to reach to white (the 150 above).