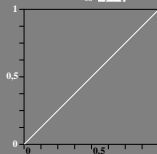A choose of a value different "0.50" changes the grey sample and surround.
Beginners often have difficulties to choose on an appropriate value.
Therefore it is recommended for beginners to proceed with image 2.
After a restart of the experiment, a value different "0.50" may be used.

adjust visual equal difference for one of 3 steps

0   e08=0,50 ◊   1

Output (9 steps)
adjusted spacing
0 <= rgb*_out <= 1

go to next image 2

one experimental value:
e08

equally spaced
0 <= rgb*_in <= 1
Input (9 steps)

heq31−1a, image 1, produce equal visual difference between Red R − Red Rw − White W

---

9 step series based only on the visual ajustment of image 1 with value "0.50" or different
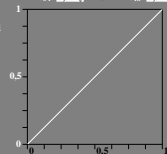
adjust visual equal difference for two of 5 steps

0   e04=0,50 ◊   1 / 0   e48=0,50 ◊   1

Output (9 steps)
adjusted spacing
0 <= rgb*_out <= 1

go to next image 3

two experimental values:
e04, e48

equally spaced
0 <= rgb*_in <= 1
Input (9 steps)

heq31−2a, image 2, produce equal visual difference between two of five steps

---

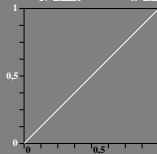9 step series based only on the visual ajustment of image 1 with value "0.50" or different

adjust visual equal difference for four of 9 steps

0   e02=0,50 ◊   1 / 0   e24=0,50 ◊   1 / 0   e46=0,50 ◊   1 / 0   e68=0,50 ◊   1

Output (9 steps)
adjusted spacing
0 <= rgb*_out <= 1

go to next image 4

four experimental values:
e02, e24, e46, e68

save 7 data above as text

equally spaced
0 <= rgb*_in <= 1
Input (9 steps)

heq31−3a, image 3, produce equal visual difference between four of nine steps

---

9 step series based only on the visual ajustment of image 1 with value "0.50" or different

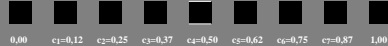9 step series based on all visual adjustments used for output linearization

0,00   c1=0,12   c2=0,25   c3=0,37   c4=0,50   c5=0,62   c6=0,75   c7=0,87   1,00

calculation with visual experimental (e) data adjusted above
a1=e08, b1=e24*a1, b3=e48(1−b2)+b2, c2=b1, c4=b2, c6=b3
c1=e02*b1, c3=e24(b2−b1)+b1, c5=e46(b3−b2)+b2, c7=e68(1−b3)+b3

save 7 data above as text

save 9 data below as text

+0,04 ◊   +0,04 ◊   +0,04 ◊   +0,04 ◊   +0,04 ◊   +0,04 ◊   +0,04 ◊   +0,04 ◊   −0,04 ◊

0,00   c1=0,12   c2=0,25   c3=0,37   c4=0,50   c5=0,62   c6=0,75   c7=0,87   1,00

grey example
difference visible?

0,25 +0,06 ◊ adjust threshold
0,25 +0,00 ◊ no change

adjust and proof threshold of
the linearized output

restart with image 1

heq31−4a, image 4, adjust visual threshold (+0,04?) of 9 steps; all equal?

heq31−3n