Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Exam 1 Practice

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

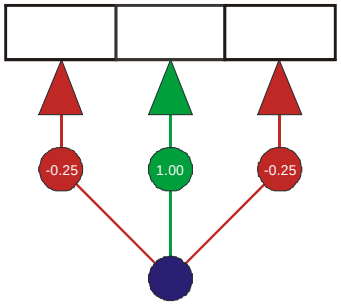
____ 1. Most of the focusing power of the eye occurs in
a. the iris.
b. the cornea.
c. the lens.
d. the optic nerve.
e. the ciliary muscles.

____ 2. Suppose Weber's law holds for the perception of pitch. If a subject can just reliably discriminate a 500 Hz tone from a 504 Hz tone, then he/she should just barely tell the difference between 750Hz and
a. 752 Hz
b. 754 Hz
c. 756 Hz
d. 758 Hz

____ 3. The cost of many rods converging to few ganglion cells is:
a. poorer color vision
b. poorer spatial resolution
c. poorer light sensitivity
d. poorer frequency discrimination

____ 4. After adapting to a vertically oriented gratings, the
a. threshold to horizontal gratings increases.
b. sensitivity to horizontal gratings increases.
c. threshold to vertical gratings increases.
d. sensitivity to vertical gratings increases.

____ 5. In the schematic of the neural circuit below, the intensity profile of a stimulus (from left to right) that would most excite this neuron is:



a. [0, 1, 0]
b. [1, 1, 1]
c. [1, 0, 1]
d. [0, 0, 0]

Short Answer

6. The perception of brightness follows Weber's law. Can this explain why we can't see the stars during the day? Explain why or why not.

Exam 1 Practice
Answer Section

MULTIPLE CHOICE

1. ANS: B
2. ANS: C
3. ANS: B
4. ANS: C
5. ANS: A

SHORT ANSWER

6. ANS:
   Yes it can. The stars are always there, but with a dark background at night they are above detection threshold. During the day, according to Weber's law, the difference threshold is greater - greater than the intensity of the stars so they're below threshold.

Exam 1 Practice [Answer Strip] **ID: A**

B 1.

C 2.

B 3.

C 4.

A 5.