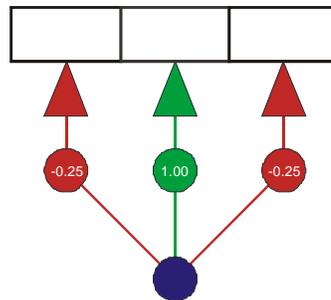


Exam 1 Practice

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.

B 1.

C 2.

B 3.

C 4.

A 5.