Problem 1. (2 points.) When a light passes from a material of small n to a material of large n, light

A) bends away from the normal

B) slows down but continues in the original direction

C) bends towards the normal

D) speeds up and continues in the original direction

Problem 2. (1.5 points.) The principle on which fiber optics is based on is

A) polarization

B) total internal reflection

C) refraction

D) dispersion

E) diffraction

Problem 3. (1.5 points.) What is the name of the process that describes why rainbows have different colors

A) polarization

B) total internal reflection

C) refraction

D) dispersion

E) diffraction

Extra Credit. (0.5 points.) For mirrors, negative image distances are associate with ................. images and positive image distances are associated with ................. images.