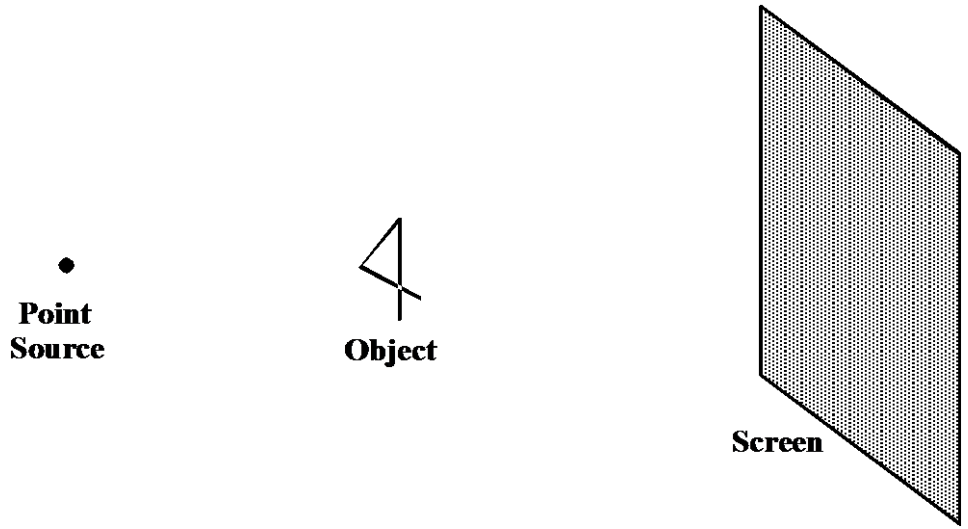
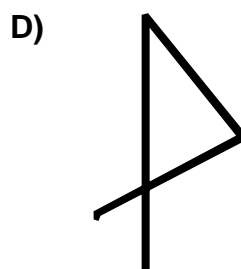
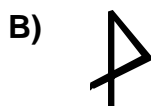
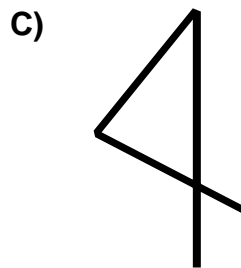
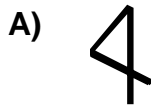


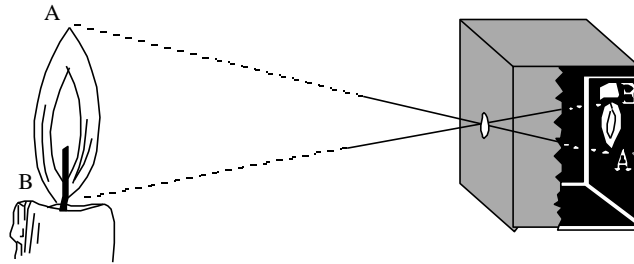
3 A point source illuminates an object placed in front of a vertical screen.



Proportionally speaking, which of the following diagrams best represents the shadow of this object?



2 What behaviour of light is illustrated in the set-up shown below?



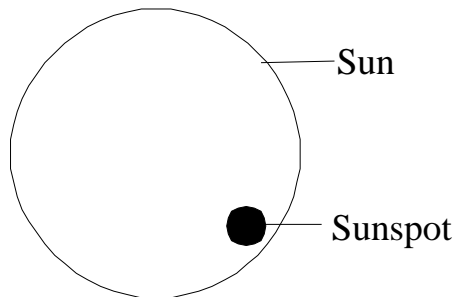
- A) Reflection of light
- B) Refraction of light
- C) The propagation of a light beam
- D) The formation of an umbra and a penumbra

3

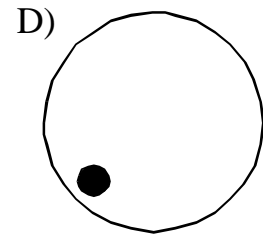
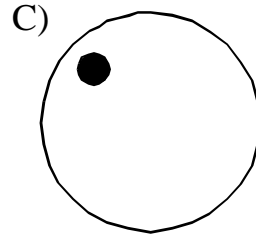
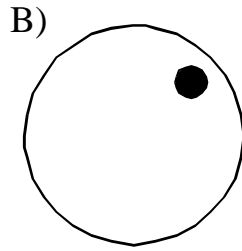
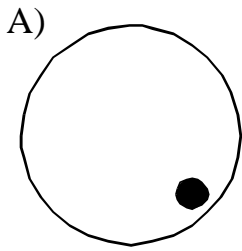
To avoid causing damage to her eyes, Virginia observed a sunspot by having the sun's light pass through a pinhole and observing it on a screen as shown here :



If the sunspot is observed directly (not through a pinhole) it appears as shown below :



In which position will the sunspot appear on the screen ?



6

What property of light is illustrated by the pinhole camera?

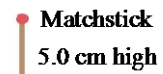
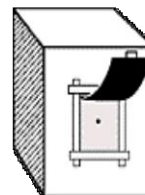
- A) The diffraction of light
- B) The rectilinear propagation of light
- C) The refraction of light
- D) The specular reflection of light

12

A pinhole camera was set up to view a 5.0 cm matchstick.

The distance to the matchstick was twice the depth of the camera.

Pinhole camera



What was the height of the image on the screen?

- A) 50.0 cm
- B) 10.0 cm
- C) 5.0 cm
- D) 2.5 cm

