

14 A student used two converging thin lenses in combination to form an image of an object.

(a) Show that the power of the combination of lenses was about 20 D.

focal length of lens 1 = 10 cm

focal length of lens 2 = 15 cm

(3)

(b) The object was 4 cm in front of the combination of lenses.

Calculate the image distance.

(2)

Image distance =

(c) The object height was 1.4 cm.

Calculate the image height.

(3)

Image height =

(d) The object is magnified.

State **two** other properties of the image.

(1)

(Total for Question 14 = 9 marks)