

64. In the closest mirror, the “first” image I_1 is 10 cm behind the mirror and therefore 20 cm from the object O . There are images from both O and I_1 in the more distant mirror: an image I_2 which is 30 cm behind that mirror (since O is 30 cm in front of it), and an image I_3 which is 50 cm behind the mirror (since I_1 is 50 cm in front of it). We note that I_2 is 60 cm from O , and I_3 is 80 cm from O . Returning to the closer mirror, we find images of I_2 and I_3 , as follows: an image I_4 which is 70 cm behind the mirror (since I_2 is 70 cm in front of it) and an image I_5 which is 90 cm behind the mirror (since I_3 is 90 cm in front of it). The distances (measured from O) for I_4 and I_5 are 80 cm and 100 cm, respectively.