

26.91) An Infinite Network. As shown in Fig. 26.83, a network of resistors of resistances R_1 and R_2 extends to infinity toward the right. Prove that the total resistance R_T of the infinite network is equal to

$$R_T = R_1 + \sqrt{R_1^2 + 2R_1R_2}$$

(*Hint:* Since the network is infinite, the resistance of the network to the right of points c and d is also equal to R_T .)

Figure **26.83** Challenge Problems 26.91 and 26.93.

