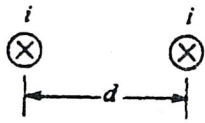


Questions 64-65 relate to the two long parallel wires shown below. Initially the wires are a distance d apart and each has a current i directed into the page. The force per unit length on each wire has magnitude F_0 .



64. The direction of the force on the right-hand wire due to the current in the left-hand wire is

- (A) to the right
- (B) to the left
- (C) upward in the plane of the page
- (D) downward in the plane of the page
- (E) into the page

65. The wires are moved apart to a separation $2d$, and the current in each wire is increased to $2i$. The new force per unit length on each wire is

- (A) $\frac{F_0}{4}$
- (B) $\frac{F_0}{2}$
- (C) F_0
- (D) $2F_0$
- (E) $4F_0$