FIGURE 3.1 Venn diagrams. (A) Shaded region: $E \cup F$; (B) shaded region: EF; (C) shaded region: E^c.
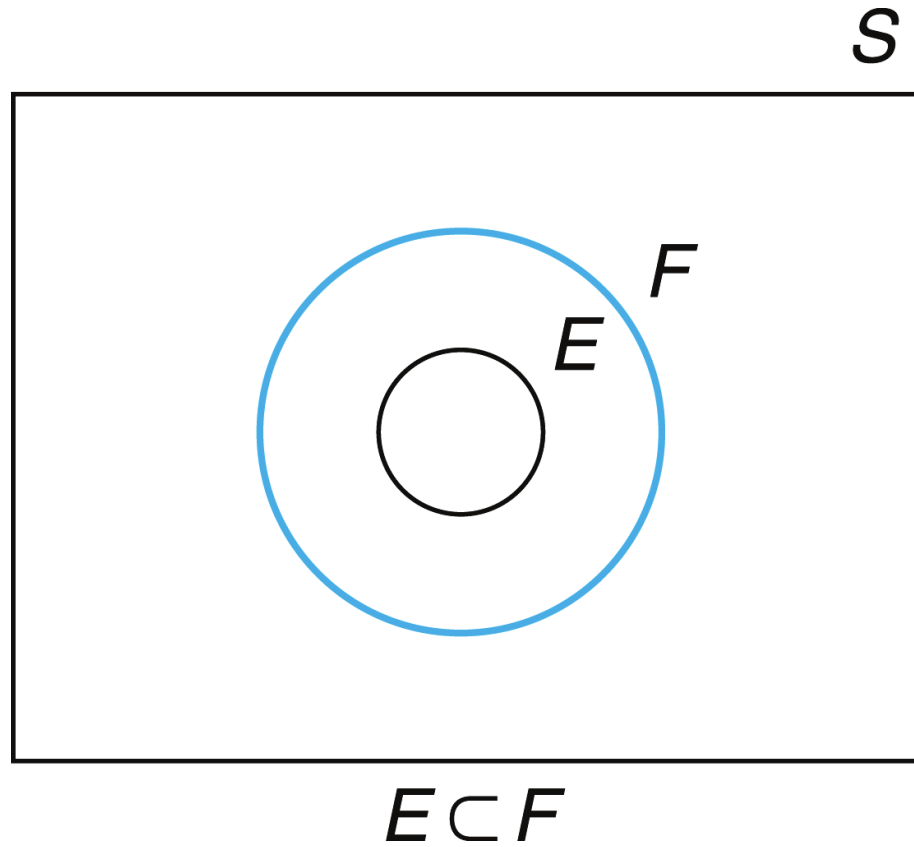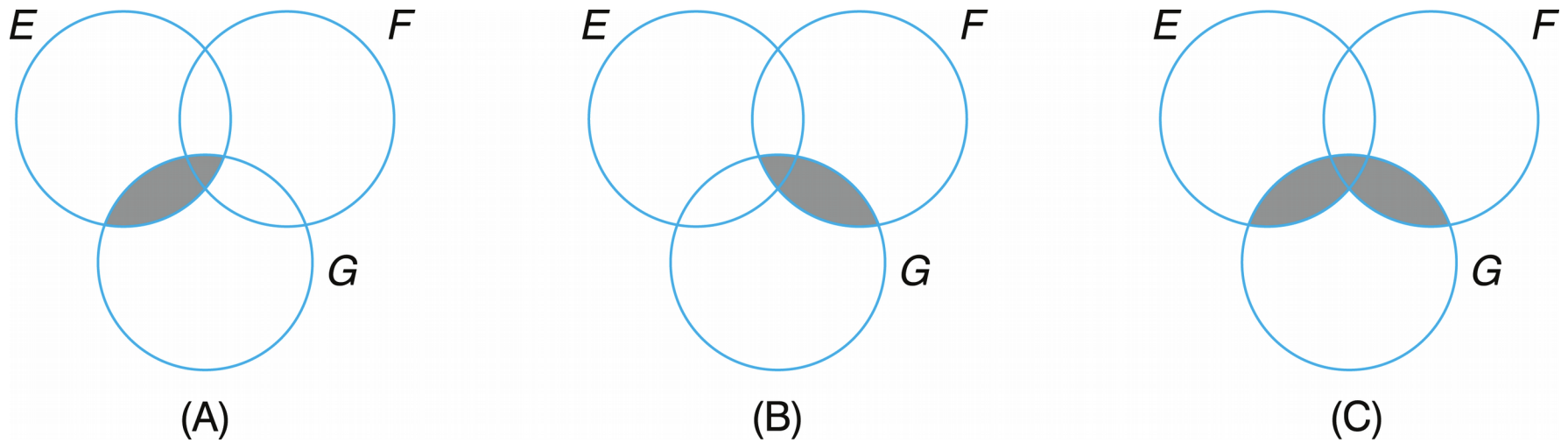
FIGURE 3.2 Venn diagram.

FIGURE 3.3 Proving the distributive law. (A) Shaded region: EG; (B) shaded region: FG; (C) shaded region: $(E \cup F)G$, $(E \cup F)G = EG \cup FG$.
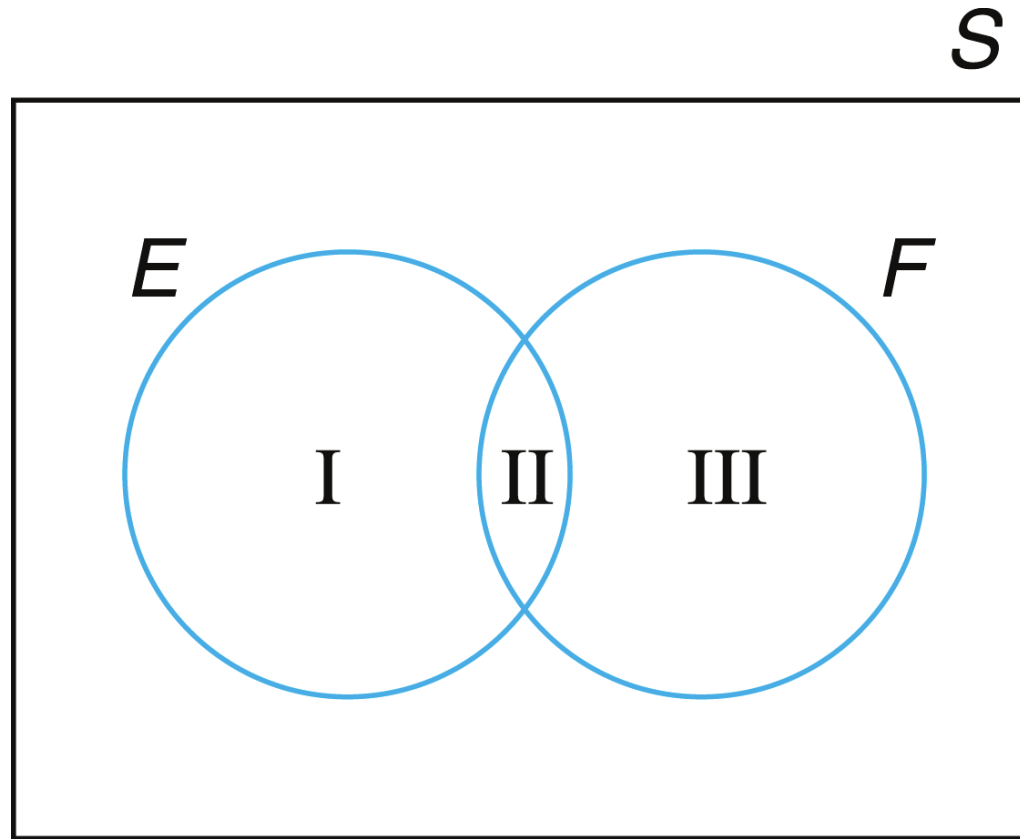
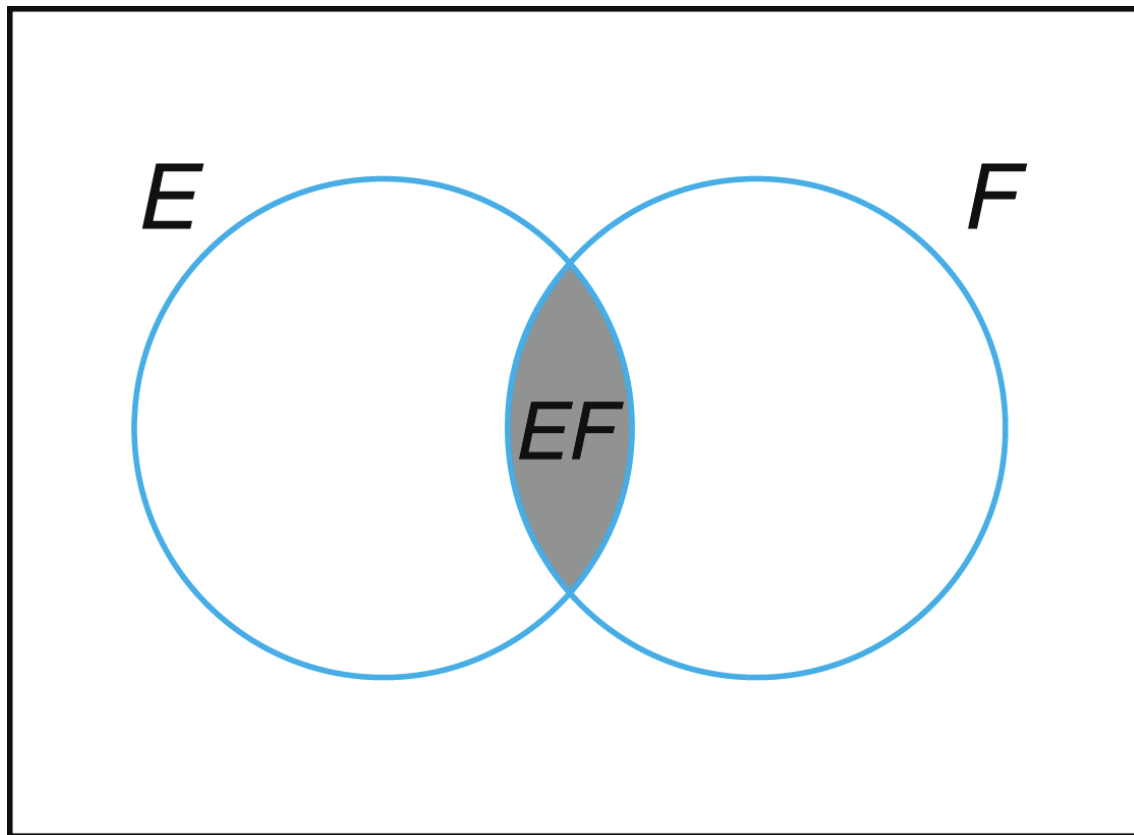**fig3**

FIGURE 3.4 Venn diagram.

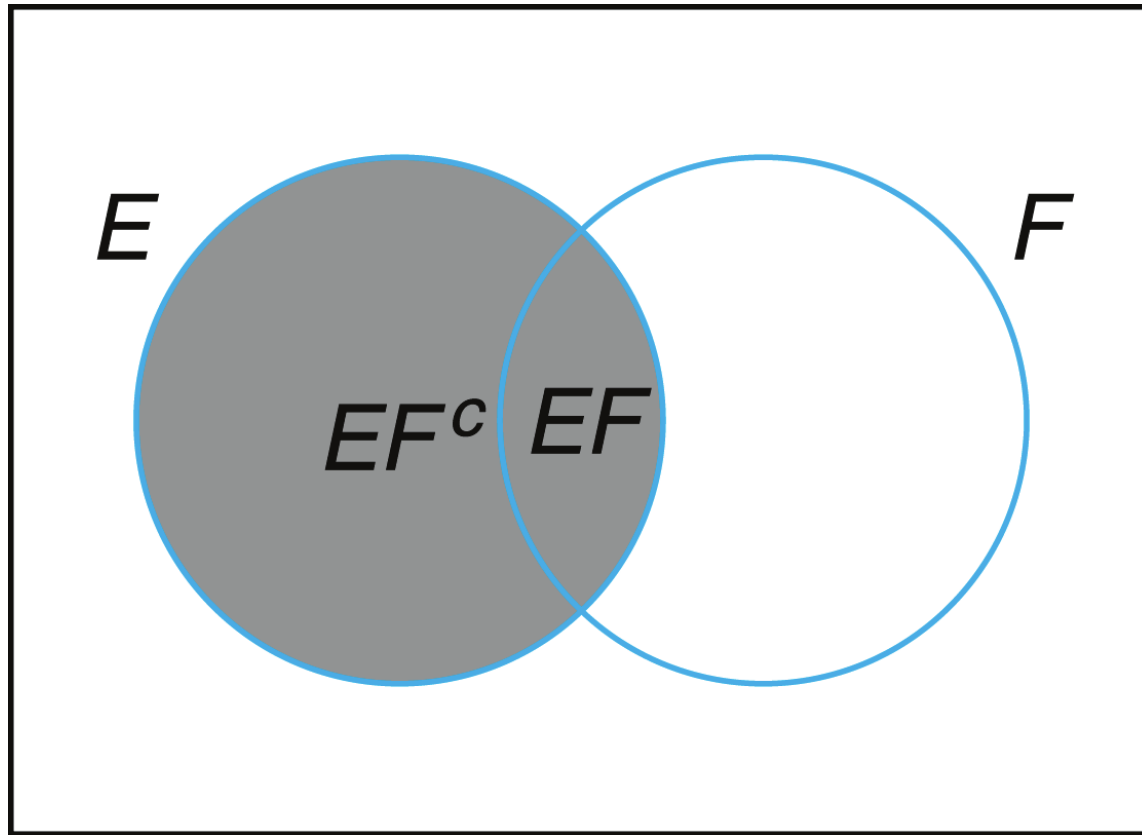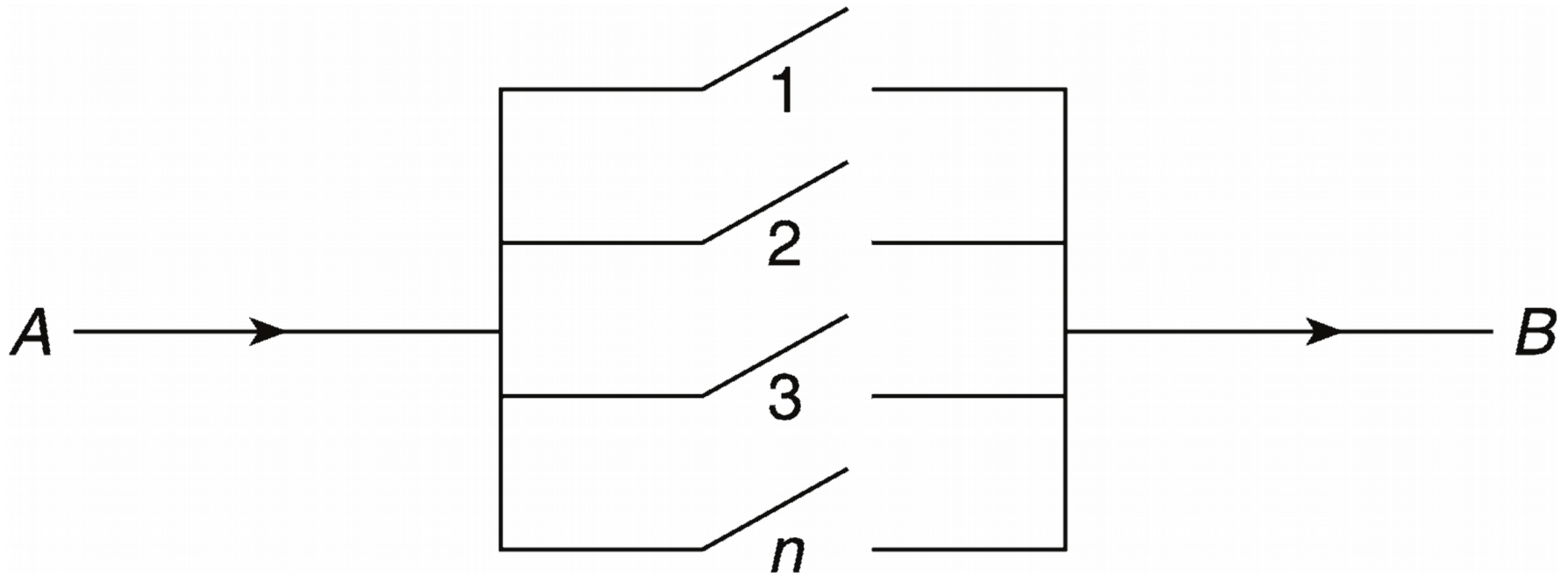**FIGURE 3.5** $P(E|F) = \frac{P(EF\ )}{P(F)}.$

FIGURE 3.6 $E = EF \cup EF^c$.

FIGURE 3.7 Parallel system: functions if current flows from A to B.