

Diagrammatic equation showing the commutation of two gates f and g on a single wire:

$$\begin{array}{c} \text{Wire} \\ \boxed{f} \\ \text{Wire} \end{array}
 \begin{array}{c} \text{Wire} \\ \boxed{g} \\ \text{Wire} \end{array}
 = (-1)^{|f||g|}
 \begin{array}{c} \text{Wire} \\ \boxed{g} \\ \text{Wire} \end{array}
 \begin{array}{c} \text{Wire} \\ \boxed{f} \\ \text{Wire} \end{array}$$

The diagram consists of four vertical lines representing wires. The first two lines are connected by a box labeled f in the middle. The next two lines are connected by a box labeled g in the middle. This is followed by an equals sign and a phase factor $(-1)^{|f||g|}$. To the right of the phase factor are two more vertical lines, each connected to a box labeled g and f respectively, in that order from left to right.