

Example 4**Self Tutor**Convert: **a** 392°F to °C**b** 30°C to °F

$$\begin{aligned}\mathbf{a} \quad C &= \frac{5}{9}(F - 32) \\ \therefore C &= \frac{5}{9}(392 - 32) \\ \therefore C &= 200 \\ \text{So, } 392^\circ\text{F} &= 200^\circ\text{C}\end{aligned}$$

$$\begin{aligned}\mathbf{b} \quad F &= \frac{9}{5}C + 32 \\ \therefore F &= \frac{9}{5} \times 30 + 32 \\ \therefore F &= 86 \\ \text{So, } 30^\circ\text{C} &= 86^\circ\text{F}\end{aligned}$$