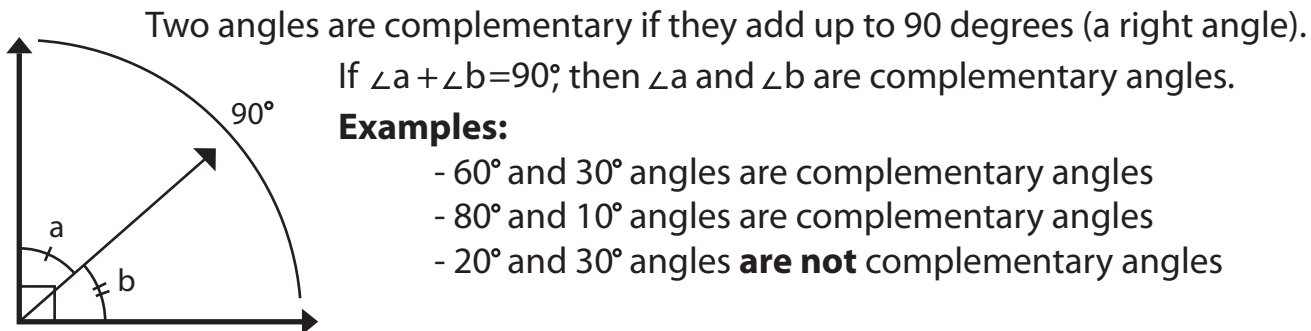


# Complementary and Supplementary Angles

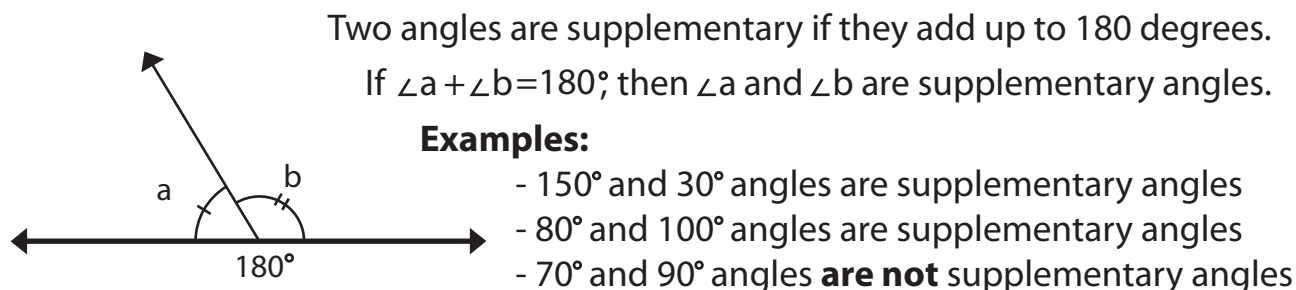
## Complementary Angles



**Practice Problems:** solve for the missing complementary angle,  $x$ .

$$\angle 45 + \angle x = 90^\circ, \angle x = \underline{45} \quad \angle x + \angle 32 = 90^\circ, \angle x = \underline{58} \quad \angle 80 + \angle x = 90^\circ, \angle x = \underline{10}$$

## Supplementary Angles



**Practice Problems:** solve for the missing supplementary angle,  $x$ .

$$\angle x + \angle 75 = 180^\circ, \angle x = \underline{105} \quad \angle x + \angle 50 = 180^\circ, \angle x = \underline{130} \quad \angle x + \angle 45 = 180^\circ, \angle x = \underline{135}$$

**Determine whether  $\angle a$  and  $\angle b$  are complementary or supplementary.**

$$\angle a = 50, \angle b = 40 \quad \underline{\text{complementary}}$$

$$\angle a = 35, \angle b = 145 \quad \underline{\text{supplementary}}$$

$$\angle a = 20, \angle b = 70 \quad \underline{\text{complementary}}$$

$$\angle a = 65, \angle b = 115 \quad \underline{\text{supplementary}}$$

$$\angle a = 80, \angle b = 100 \quad \underline{\text{supplementary}}$$

$$\angle a = 75, \angle b = 15 \quad \underline{\text{complementary}}$$

$$\angle a = 60, \angle b = 120 \quad \underline{\text{supplementary}}$$

$$\angle a = 65, \angle b = 25 \quad \underline{\text{complementary}}$$