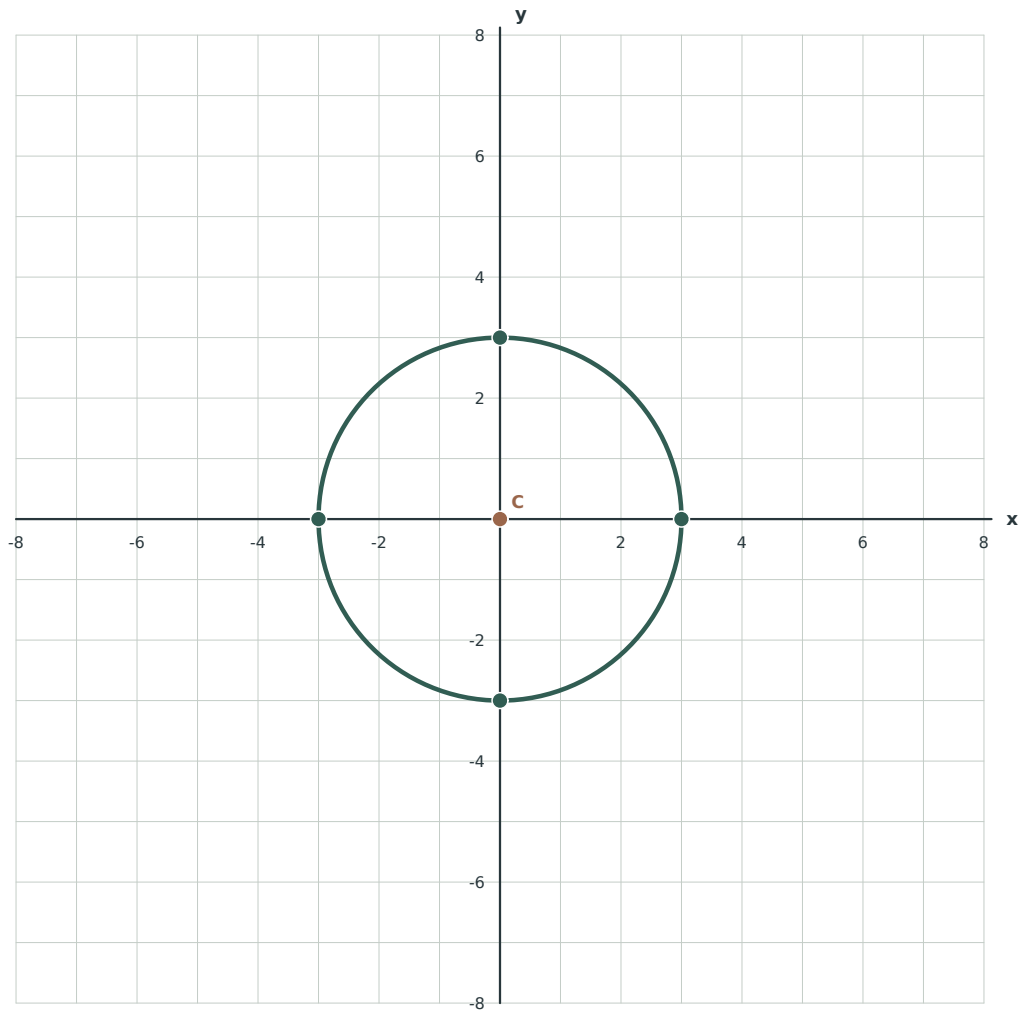


Origin circle

Plot the center, mark the radius in four cardinal directions and draw a smooth circle. The equation uses coordinate units, not the printed diameter.

Center $C=(0,0)$; radius $r=3$.

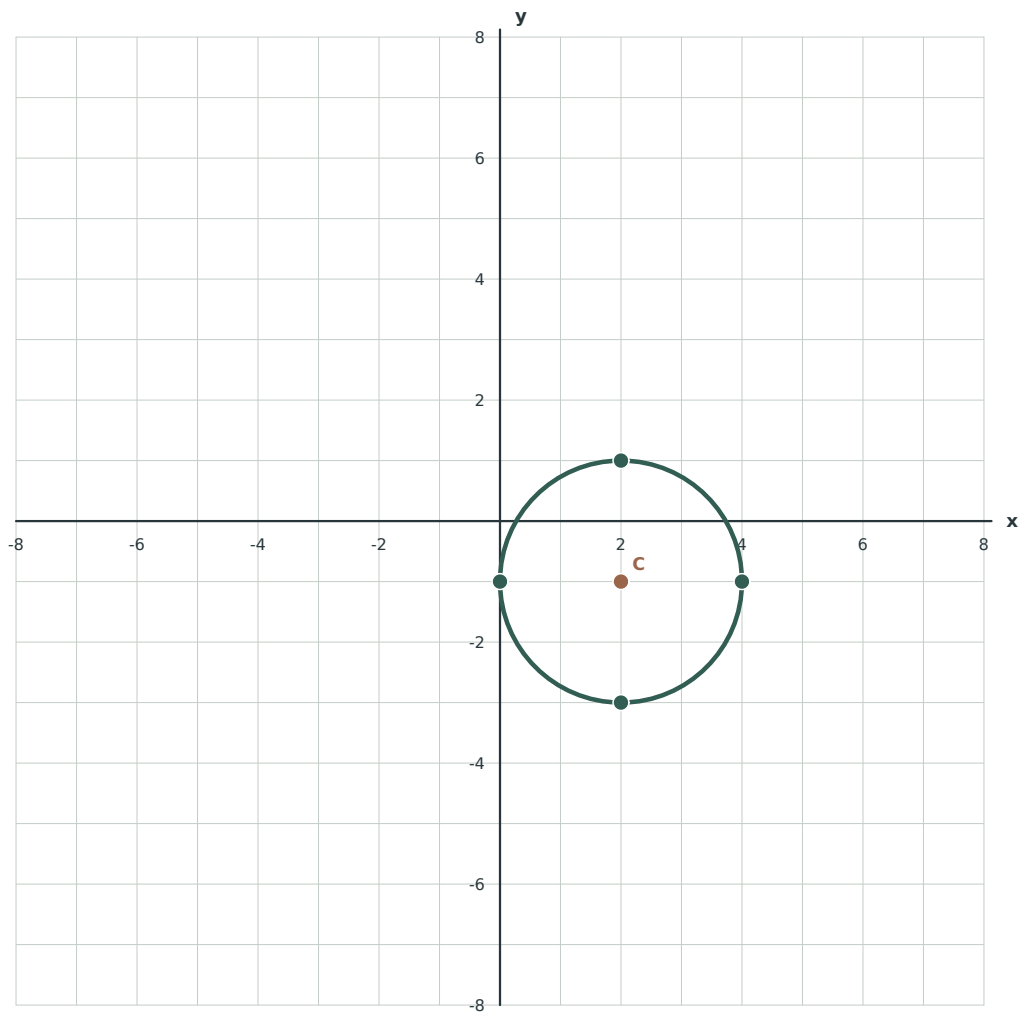


1. State center and radius. Center $(0,0)$; radius 3.
2. Mark four cardinal points. Cardinal points: $(-3,0)$, $(3,0)$, $(0,-3)$, $(0,3)$.
3. Write standard-form equation. $(x - (0))^2 + (y - (0))^2 = 9$.

Right-shifted circle

Plot the center, mark the radius in four cardinal directions and draw a smooth circle. The equation uses coordinate units, not the printed diameter.

Center $C=(2,-1)$; radius $r=2$.

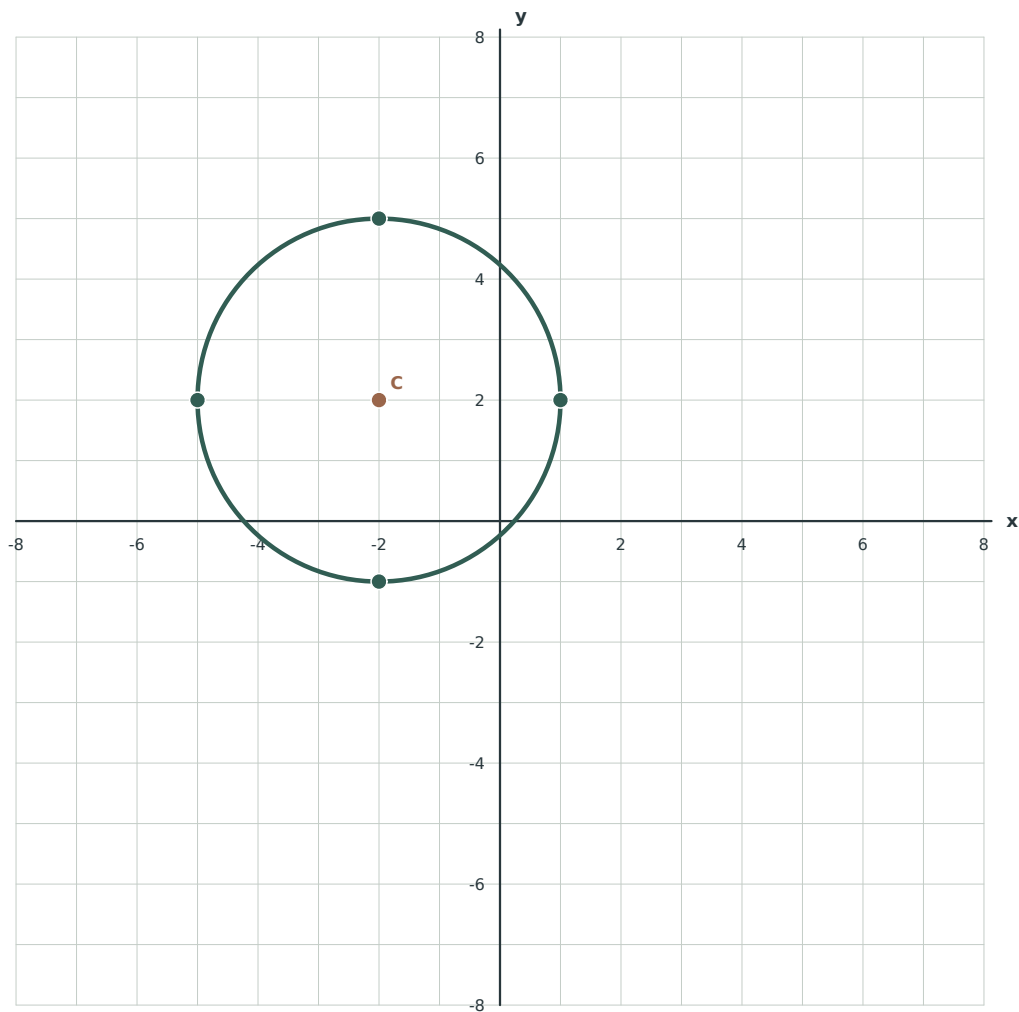


1. State center and radius. Center $(2, -1)$; radius 2.
2. Mark four cardinal points. Cardinal points: $(0, -1)$, $(4, -1)$, $(2, -3)$, $(2, 1)$.
3. Write standard-form equation. $(x - 2)^2 + (y - (-1))^2 = 4$.

Upper-left circle

Plot the center, mark the radius in four cardinal directions and draw a smooth circle. The equation uses coordinate units, not the printed diameter.

Center $C=(-2,2)$; radius $r=3$.

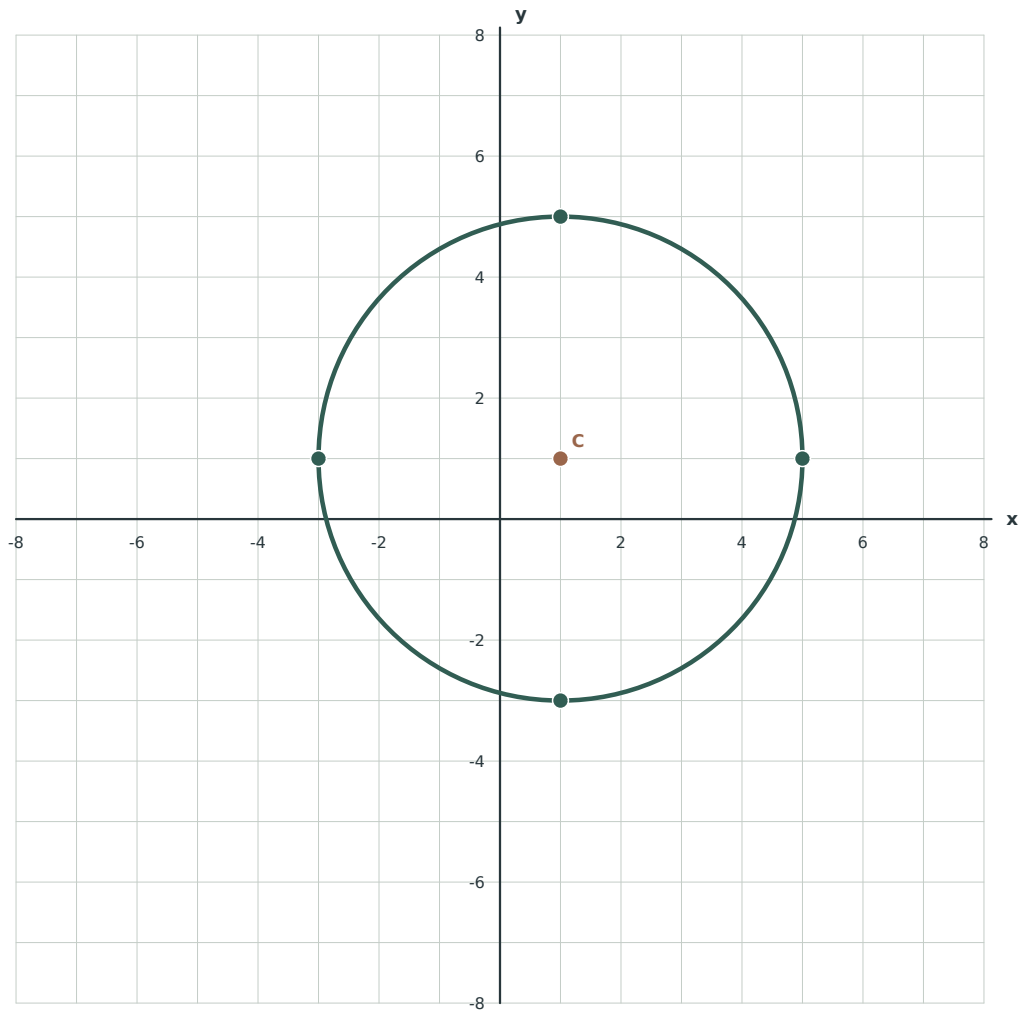


1. State center and radius. Center $(-2,2)$; radius 3.
2. Mark four cardinal points. Cardinal points: $(-5,2)$, $(1,2)$, $(-2,-1)$, $(-2,5)$.
3. Write standard-form equation. $(x - (-2))^2 + (y - (2))^2 = 9$.

A larger circle

Plot the center, mark the radius in four cardinal directions and draw a smooth circle. The equation uses coordinate units, not the printed diameter.

Center $C=(1,1)$; radius $r=4$.



1. State center and radius. Center $(1,1)$; radius 4.
2. Mark four cardinal points. Cardinal points: $(-3,1)$, $(5,1)$, $(1,-3)$, $(1,5)$.
3. Write standard-form equation. $(x - (1))^2 + (y - (1))^2 = 16$.