Algorithm: Midpoint Circle Drawing Algorithm:

Step 1: Start

Step 2: Input radius r and center coordinates (xc, yc)

Step 3: Initialize:

$x = 0$

$y = r$

$p = 1 - r$

Step 4: Plot the initial points using 8-way symmetry:

$(xc \pm x, yc \pm y)$

$(xc \pm y, yc \pm x)$

Step 5: Repeat while $x < y$

Step 6: Increment x-coordinate:

$x = x + 1$

Step 7: Check decision parameter:

If $p < 0$

$p = p + 2x + 1$

Else:

$y = y - 1$

$p = p + 2(x - y) + 1$

Step 8: Plot the symmetric points for the new (x, y)

$(xc \pm x, yc \pm y)$

$(xc \pm y, yc \pm x)$

Step 9: Continue steps 5 to 8 until $x \geq y$

Step 10: Stop