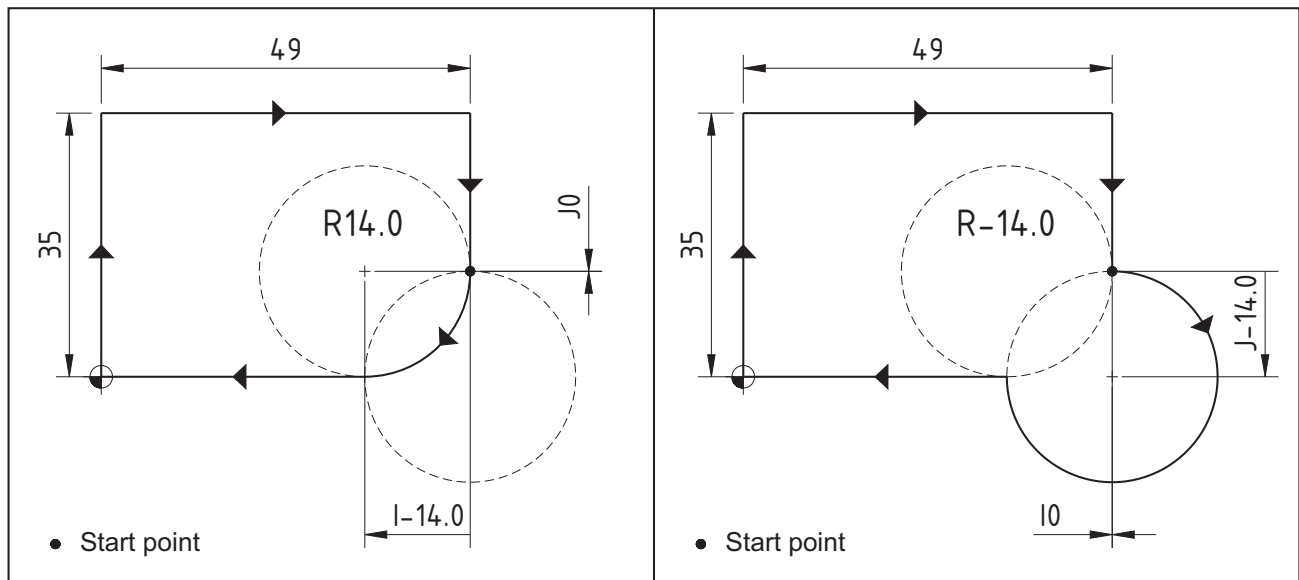


## Radius Sweep

There are two ways to program radius in these examples. One is to use direct radius R as a *positive* value (R14.0) for the 90 degree radius sweep and direct radius R as a *negative* value (R-14.0) for the 270 degree sweep. The other method is to use the arc vectors I and J. Negative R is used for arc sweeps from 180 degrees to *less than* 360 degrees. Radius R cannot be used for full circle programming - use I and J vectors instead.



The programs are very similar:

<p>(90 DEGREE ARC - R RADIUS)</p> <pre> N1 G21 N2 G90 G54 X0 Y0 N3 G01 Y35.0 F100.0 N4 X49.0 N5 Y21.0 N6 G02 X35.0 Y0 R14.0 N7 G01 X0 </pre>	<p>(90 DEGREE ARC - I AND J VECTORS)</p> <pre> N1 G21 N2 G90 G54 X0 Y0 N3 G01 Y35.0 F100.0 N4 X49.0 N5 Y21.0 N6 G02 X35.0 Y0 I-14.0 J0 N7 G01 X0 </pre>
<p>(270 DEGREE ARC - R RADIUS)</p> <pre> N1 G21 N2 G90 G54 X0 Y0 N3 G01 Y35.0 F100.0 N4 X49.0 N5 Y21.0 N6 G02 X35.0 Y0 R-14.0 N7 G01 X0 </pre>	<p>(270 DEGREE ARC - I AND J VECTORS)</p> <pre> N1 G21 N2 G90 G54 X0 Y0 N3 G01 Y35.0 F100.0 N4 X49.0 N5 Y21.0 N6 G02 X35.0 Y0 I0 J-14.0 N7 G01 X0 </pre>