```
circle diameter
                             s = start of arc
                                  extent = endAngle - startAngle
startAngle = to deg(-atan2(s.y - c.y, s.x - c.x))
    c = circle center
                endAngle = to deg(-atan2(e_y - c_y, e_x - c_x))
                                         e = end of arc
```

topLeftX, topLeftY

```
double endAngle = Math.toDegrees(-Math.atan2(e.y - c.y, e.x - c.x));
double extent = endAngle - startAngle;
double topLeftX = c.x - radius;
double topLeftY = c.y - radius;
double d = radius * 2.0;
Arc2D arc = new Arc2D.Double(topLeftX, topLeftY, d, d, startAngle, extent, Arc2D.OPEN);
g2.setPaint(Color.BLUE);
g2.draw(arc);
```

double startAngle = Math.toDegrees(-Math.atan2(s.y - c.y, s.x - c.x));