```
long double cirDis(point &a, point &b, point &c, long double r) {
    long double dc = dis(a,b);
    long double da = dis(b,c);
    long double db = dis(a,c);
    long double beta = findAngle(da,db,dc);
    long double alpha = (2 * pi - 2 * beta) / 2;
    if(alpha == 0) return 0;
    if(alpha > pi / 2) beta += 2 * (alpha - pi / 2);
    else {
        alpha = pi / 2 - alpha;
        beta -= 2 * alpha;
    }
    return beta * r;
}
```