Circle Geo.

```
double segmentToPointDistance(const Point &a, const Point &b, const Point &p) {
        Point norm = (b - a).unit();
        double reflection = dot(p - a, norm);
        if (reflection >= dist(a, b)) return dist(p, b);
        if (reflection < 0) return dist(p, a);
        Point q = p + (a - b).ort();
        return dist(lineIntersection(a, b, p, q), p);
}

long double findAngle(long double a, long double b, long double c) {
   return acos((a * a + c * c - b * b) / (2 * a * c));
}

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;
}

double segmentArea(double r) {
   double perimeter = 2 * pi * r;
   double arc = perimeter / n;
   double angle = arc / r;
   double sa = (angle - sin(angle)) ;
   sa = sa * r * r;
   sa /= 2;
   return sa;
}

double chord(double r) {
   double perimeter = 2 * pi * r;
   double arc = perimeter / n;
   double angle = arc / r;
   return 2 * r * sin(angle / 2);
}
```