find forth point of rectangle:

```cpp
typedef complex<double> point;
//should be in order      A             B             C
point find_forth(point first , point second , point third){
    point cur = (first + third) / 2.0;
    point target = 2.0 * cur - second;
    return target;
}
```

angle of line first-second with X_axis

```cpp
long double angle_with_x(point first , point second){
    return atan2((second.imag() - first.imag()), (second.real() - first.real()));
}
```

rotate p around c by angle

```cpp
point rotate(point p, point c, long double angle) {
    angle*=-1;
    point rotated = polar(abs(p - c), arg(p - c) + angle);
    return rotated;
}
```

Volume of cone

```cpp
double volumeOfCone(double h ,double r){
    return (1.0/3.0)*(pi*r*r*h);
}
```

degree to radian

```cpp
double toRadian(double degree){
    return degree*(pi/180.0);
}
```