1.

private static boolean pointIsInCircle(double xCoord, double yCoord) {

if ((xCoord - 1.0) \* (xCoord - 1.0)

+ ((yCoord - 1.0) \* (yCoord - 1.0)) <= 1.0) {

return true;

}

return false;

}

2.

private static int numberOfPointsInCircle(int n) {

int ptsInSquare = 0, ptsInCircle = 0;

Random rnd = new Random1L();

while (ptsInSquare < n) {

double x = 2 \* rnd.nextDouble(); // generates x point in 0.0, 2.0 plane

double y = 2 \* rnd.nextDouble(); // generates y point in 0.0, 2.0 plane

ptsInSquare++;

// Check if x, y is inside the circle centered at (1,1) with radius 1

if ((x - 1.0) \* (x - 1.0) + ((y - 1.0) \* (y - 1.0)) <= 1.0) {

ptsInCircle++;

}

}

return ptsInCircle;

}