

Small Data for Interval Problems

金之涵

As for the interval problems in 2-dimensional space and on the circle, I wrote two codes using brute force and acquired some fractional answer for several small cases collective.

| n | 2d-fraction | 2d-decimal | circle-fraction | circle-decimal |
|---|------------------------|------------|-------------------------------|----------------|
| 2 | $\frac{4}{9}$ | 0.444444 | $\frac{5}{6}$ | 0.833333 |
| 3 | $\frac{268}{675}$ | 0.397037 | $\frac{53}{60}$ | 0.883333 |
| 4 | $\frac{3754}{11025}$ | 0.340499 | $\frac{191}{210}$ | 0.909524 |
| 5 | $\frac{49402}{165375}$ | 0.298727 | $\frac{4681}{5040}$ | 0.92877 |
| 6 | - | - | $\frac{156823}{166320}$ | 0.942899 |
| 7 | - | - | $\frac{4123331}{4324320}$ | 0.953521 |
| 8 | - | - | $\frac{124757879}{129729600}$ | 0.961676 |