## Areas and Circumferences of Circles

| Diameter | | Circumference | | Area | |
|---|---|---|---|---|---|
| Inches | mm | Inches | mm | Inches² | mm² |
| 1/8 | 6 | 0.40 | 10 | 0.01227 | 8.0 |
| 1/4 | 8 | 0.79 | 20 | 0.04909 | 31.7 |
| 3/8 | 10 | 1.18 | 30 | 0.11045 | 71.3 |
| 1/2 | 15 | 1.57 | 40 | 0.19635 | 126.7 |
| 3/4 | 20 | 2.36 | 60 | 0.44179 | 285.0 |
| 1 | 25 | 3.14 | 80 | 0.7854 | 506.7 |
| 1-1/4 | 32 | 3.93 | 100 | 1.2272 | 791.7 |
| 1-1/2 | 40 | 4.71 | 120 | 1.7671 | 1,140.1 |
| 2 | 50 | 6.28 | 160 | 3.1416 | 2,026.8 |
| 2-1/2 | 65 | 7.85 | 200 | 4.9087 | 3,166.9 |
| 3 | 80 | 9.43 | 240 | 7.0686 | 4,560.4 |
| 4 | 100 | 12.55 | 320 | 12.566 | 8,107.1 |
| 5 | 125 | 15.71 | 400 | 19.635 | 12,667.7 |
| 6 | 150 | 18.85 | 480 | 28.274 | 18,241.3 |
| 7 | 175 | 21.99 | 560 | 38.485 | 24,828.9 |
| 8 | 200 | 25.13 | 640 | 50.265 | 32,428.9 |
| 9 | 225 | 28.27 | 720 | 63.617 | 41,043.1 |
| 10 | 250 | 31.42 | 800 | 78.540 | 50,670.9 |

### EQUAL PERIPHERIES

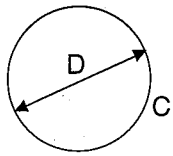
$S = 0.7854\ D$

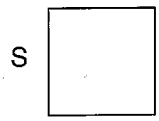
$D = 1.2732\ S$

$S = 0.8862\ D$

$D = 1.1284\ S$

$S = 0.2821\ C$




### EQUAL AREAS

Area of square (S') =
1.2732 x area of circle

Area of square (S) =
0.6366 x area of circle

$C = \pi D = 2\pi R$

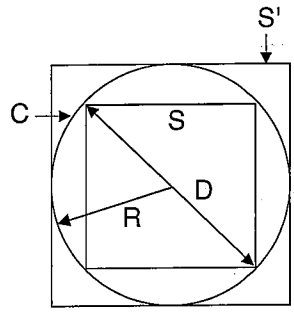
$C = 3.5446\ \sqrt{area}$

$D = 0.3183\ C = 2R$

$D = 1.1283\ \sqrt{area}$

$Area = \pi R^2 = 0.7854\ D^2$

$Area = 0.07958\ C^2 = \frac{\pi D^2}{4}$




$\pi = 3.1416$