

Areas and Circumferences of Circles

Diameter mm	Circumference mm	Area mm ²
6	10	28
8	20	50
10	30	79
15	40	177
20	60	314
25	80	491
32	100	804
40	120	1257
50	160	1964
65	200	3318
80	240	5027
100	320	7854
125	400	12,272
150	480	17,672
175	560	24,053
200	640	31,416
225	720	39,761
250	800	49,088

EQUAL PERIPHERIES

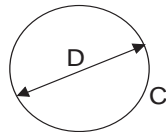
$$S = 0.7854 D$$

$$D = 1.2732 S$$

$$S = 0.8862 D$$

$$D = 1.1284 S$$

$$S = 0.2821 C$$



EQUAL AREAS

$$\begin{aligned} \text{Area of square (S')} &= \\ &1.2732 \times \text{area of circle} \end{aligned}$$

$$\begin{aligned} \text{Area of square (S)} &= \\ &0.6366 \times \text{area of circle} \end{aligned}$$

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

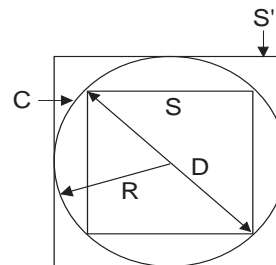
$$C = 3.5446 \sqrt{\text{area}}$$

$$D = 0.3183 C = 2R$$

$$D = 1.1283 \sqrt{\text{area}}$$

$$\text{Area} = \pi R^2 = 0.7854 D^2$$

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



$$\pi = 3.1416$$

SI: 1mm = 0.04 in.; 1mm² = 0.002 in.²