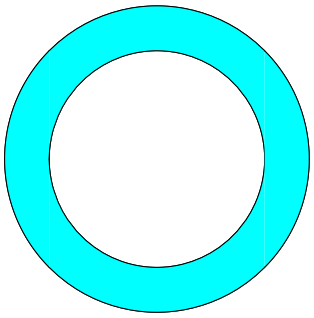
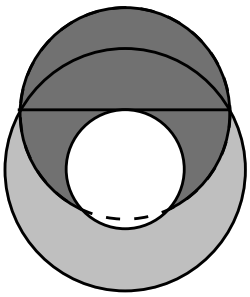
Annulus



The region lying between two concentric circles. The area of the annulus formed by two circles of radii a and b (with $a > b$) is

$$A_{\text{annulus}} = \pi\left(a^2 - b^2\right).$$

The annulus is implemented in the Wolfram Language as Annulus[{x, y}, {b, a}].



In the above figure, the area of the circle whose diameter is tangent to the inner circle and has endpoints at the outer circle is equal to the area of the annulus.

SEE ALSO

Annulus Theorem, Bullseye Illusion, Chord, Circle, Concentric Circles, Lune, Spherical Shell

EXPLORE WITH WOLFRAM|ALPHA

More things to try:
= annulus
= (1+e)/2
= corners |x^3 - 2x^2 - 16x + 6|

REFERENCES

Harris, J. W. and Stocker, H. "Annulus, Circular Ring." §3.8.3 in *Handbook of Mathematics and Computational Science.* New York: Springer-Verlag, p. 91, 1998.

Pappas, T. "The Amazing Trick." *The Joy of Mathematics.* San Carlos, CA: Wide World Publ./Tetra, p. 69, 1989.

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SUBJECT CLASSIFICATIONS

Geometry › Plane Geometry › Circles ›

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