Drawing Arcs

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Terms, for the purposes of this sheet: Arc is a section of a circle. Chord is a line from one side of the circle to the other. Height is the perpendicular distance from the chord to the top of the arc.

a = height b = half the chord r = radius of the circle or arc



To determine the radius if you know a and b:

$$r = \frac{(b^2 + a^2)}{2a}$$

To determine a if you know b and r:

$$a = r - sqrt (r^2 - b^2)$$

To determine b if you know a and r:

$$b = sqrt (2ar - a^2)$$

