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*Reuleaux Triangle* Assignment

## **Reuleaux Triangle**

The Reuleaux triangle is a type of Reuleaux polygon, which is a curve in which all diameters are the same length. Though he did not discover it, this group of shapes is named after Franz Reuleaux, a German engineer who in the 19<sup>th</sup> century made investigations on how machines translate one type of motion into another. Excluding the circle, the Reuleaux triangle is the simplest example of a curve of constant width, and also has the least area of any such curve. The triangle can be constructed by using a drawing of an equilateral triangle and a compass. For each side, center the compass of the vertex opposite it, and draw an arc between the two vertices of the side to create the triangle. One practical application of the Reuleaux triangle was in the rotor of the Wankel engine, though its unique shape was hard to produce and had some limitations. It is continued to be used in the Mazda RX-8.