

The driving pulley is called the Driver, and the driven pulley the Driven. If the number of *teeth in gears* used instead of diameter, in these calculations, number of teeth must be substituted wherever diameter occurs.

**To find the diameter of the Driver;** the diameter of the Driven and its revolutions, and also revolutions of Driver being given: Multiply the diameter of Driven by its revolutions, and divide the product by the revolutions of the Driver; the quotient will give the diameter of the Driver.

**To find diameter of the Driven;** the revolutions of the Driven, also diameter and revolutions of the Driver being given: Multiply the diameter of Driver by its revolutions, and divide the product by the revolutions of the Driven; the quotient will give the diameter of the Driven

**To find the revolutions of Driver;** the diameter and revolutions of the Driven, also diameter of the Driver being given: Multiply the diameter of Driven by its revolutions, and divide the product by the diameter of Driver; the quotient will give the revolutions of Driver.

**To find revolutions of the Driven;** the diameter and revolutions of the Driver, also diameter of the Driven being given: Multiply the diameter of Driver by its revolutions, and divide the product by the diameter of Driven; the quotient will give the revolutions of Driven.

$$\text{Diam. of Driver} = \frac{D_2 \times S_2}{S_1}$$

$$\text{Diam. of Driven} = \frac{D_1 \times S_1}{S_2}$$

$$\text{Revs of Driver} = \frac{D_2 \times S_2}{D_1}$$

$$\text{Revs of Driven} = \frac{D_1 \times S_1}{D_2}$$

