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1. **Dry friction** is a force that opposes the relative lateral motion of two solid surfaces in contact. Dry friction is subdivided into static friction between non-moving surfaces, and kinetic friction between moving surfaces. An example of dry friction is when a person is riding a bicycle and presses the brakes, the rough edges on the brake pads rub against the bicycle rim and it ends up slowing down the rim.

**Fluid friction** describes the friction between layers of a viscous fluid that are moving relative to each other. An example of fluid friction is lubricants used in hinges.

1. **Wedges**: A wedge is simple machine that consists of two inclined planes, giving it a thin end and thick end, as you can see in the Figure below. A wedge is used to cut or split apart objects. Force is applied to the thick end of the wedge, and the wedge, in turn, applies force to the object along both of its sloping sides. This force causes the object to split apart.

**Square-Threaded Screw**: The square thread form is a common screw thread form, used in high load applications such as leadscrews and jackscrews. It gets its name from the square cross-section of the thread. It is the lowest friction and most efficient thread form, but it is difficult to fabricate.

**Journal bearing**: A journal bearing in its simplest form is a cylindrical brushing made of suitable material and containing properly machined inside and outside diameters. The journal is usually the part of the shaft or pins that rotates inside the bearing