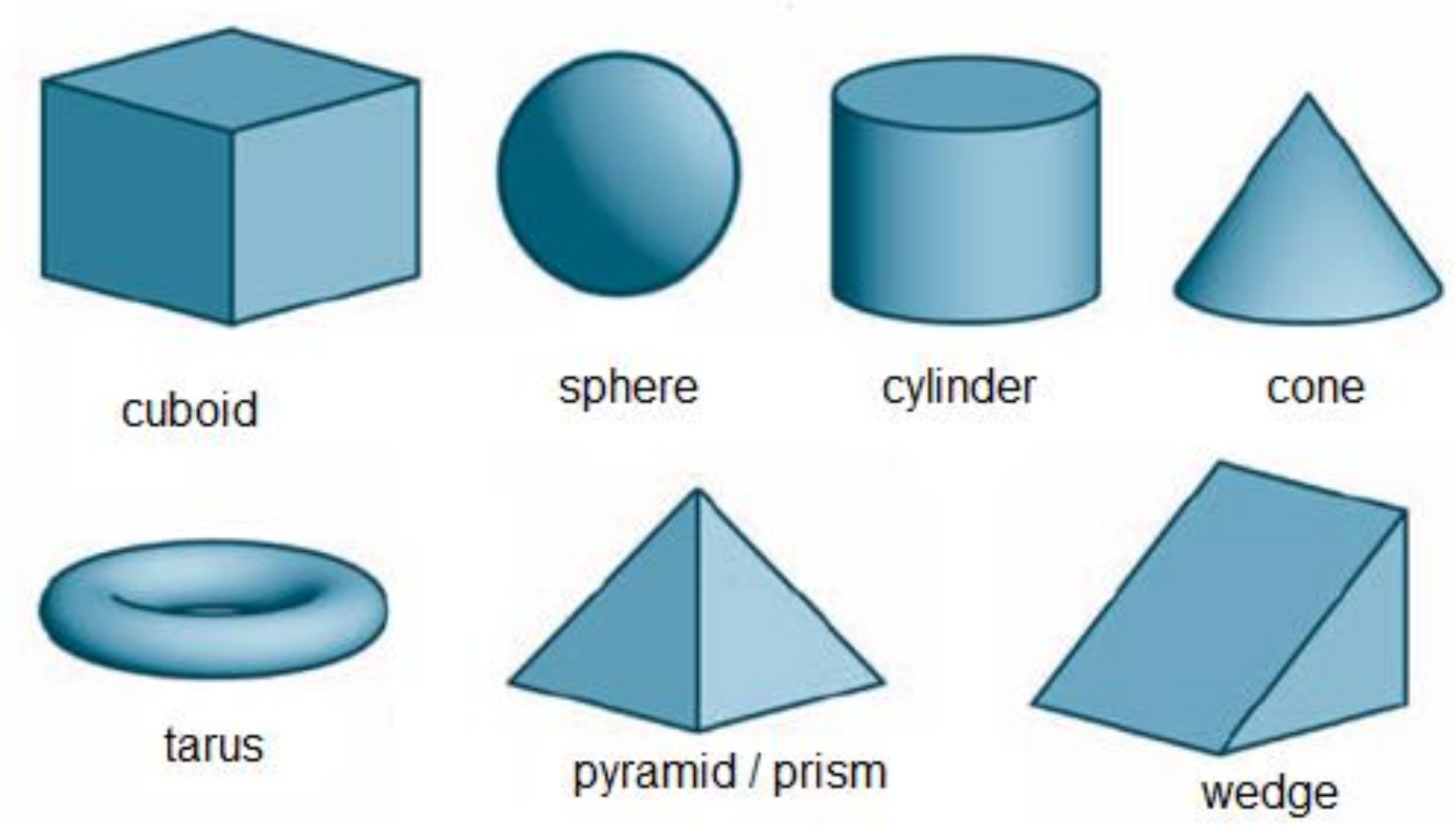
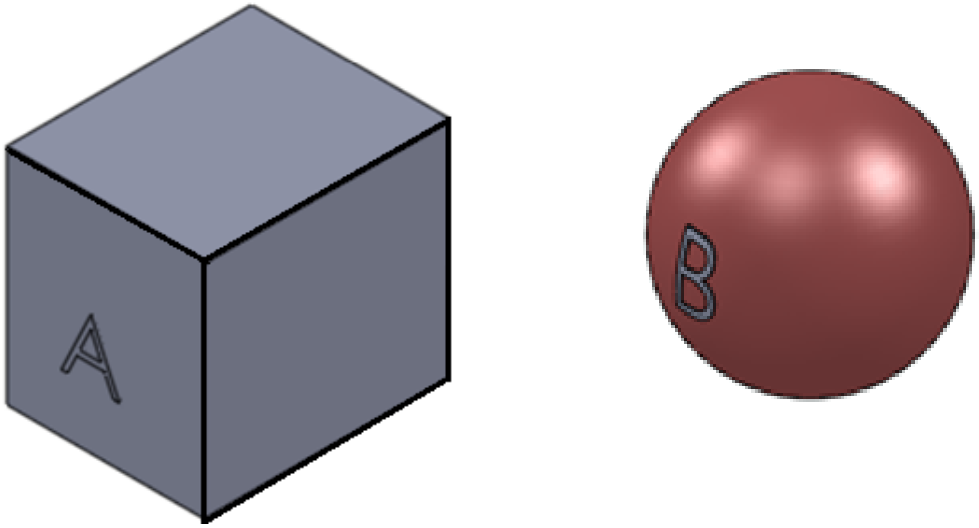
Constructive Solid Geometry

CSG describes a solid model as combinations of basic three-dimensional shapes known as **primitives**.



Primitives are combined using Boolean Operations

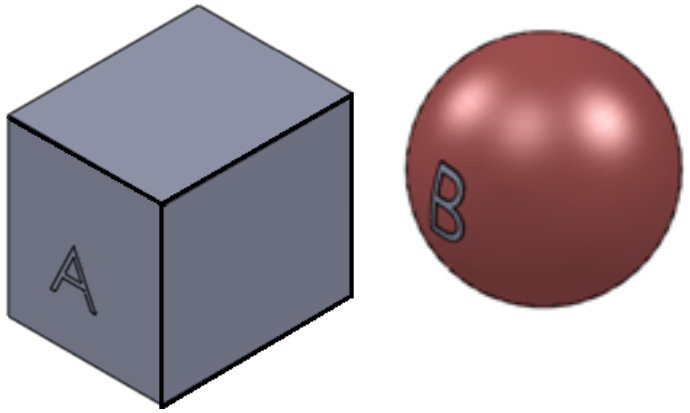


Boolean Union $A + B$

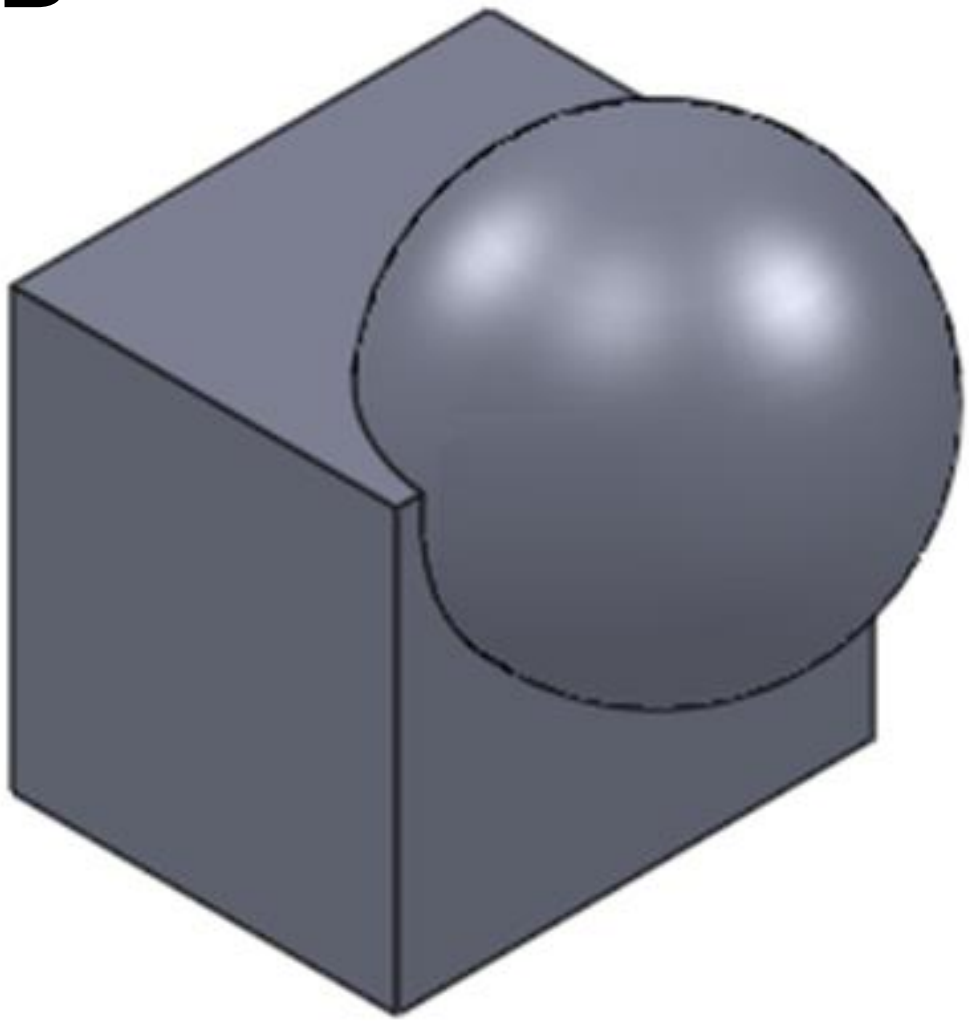
Boolean Difference $A - B$

Boolean Intersection $A \cap B$

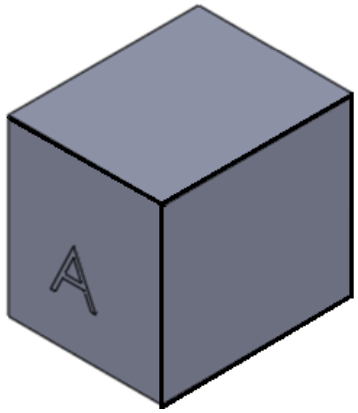
Boolean Union



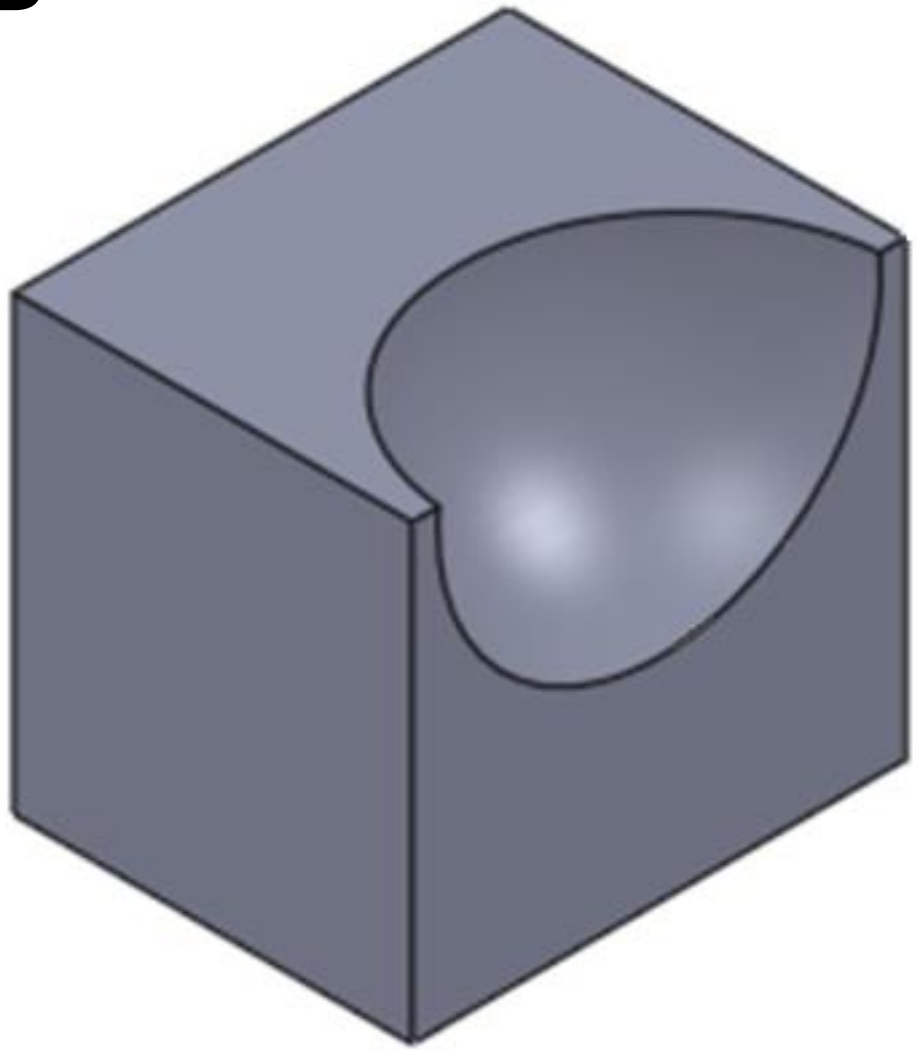
A + B



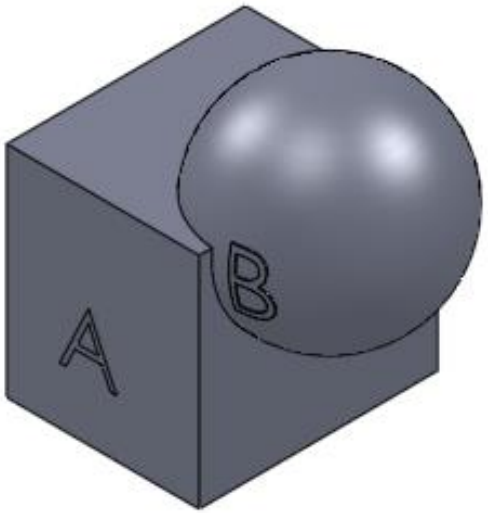
Boolean Difference



A – B

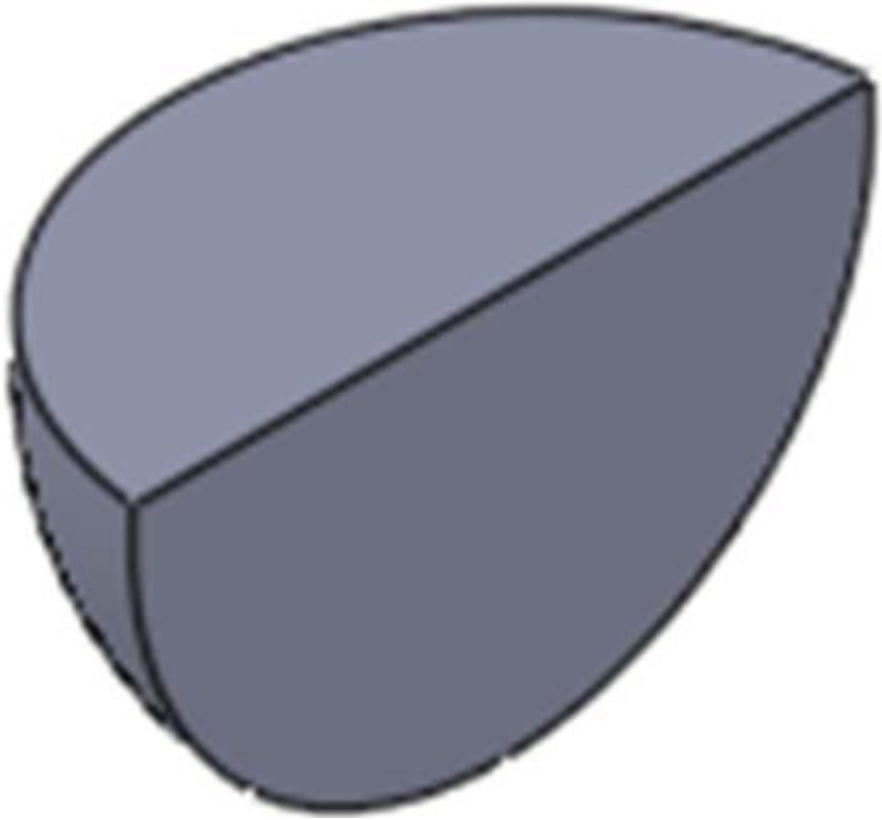


Boolean Intersection



The portion common to both objects:

A ∩ B



A More Complex Boolean intersection