

PROJECT ARCHIMEDES

Mathematician, Engineer, Inventor,
Physicist, Astronomer

287 B.C



EUREKA MOMENT

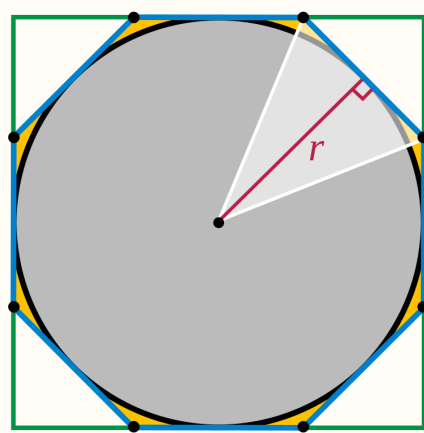
Archimedes' Principle

A body immersed in a fluid is subject to an upward force equal in magnitude to the weight of fluid it displaces!

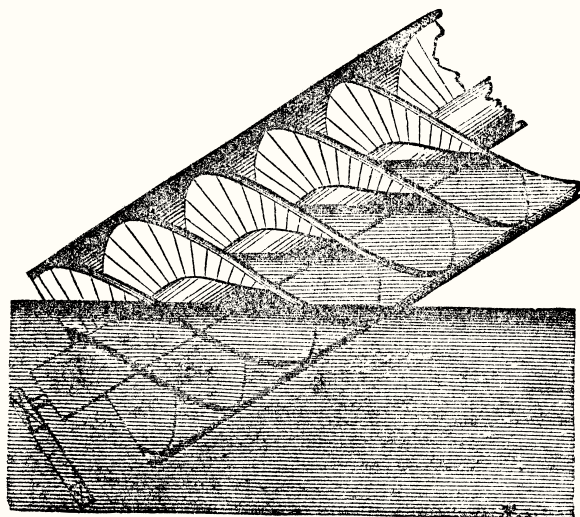
PI - FINDER

The first accurate estimation of the value of pi

He drew a regular polygon outside a circle and another inside it; and progressively increased the number of sides of both the polygons till they had 96 sides each. In this way he has calculated the area of a circle and the closest boundaries for Pi..



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ARCHIMEDES' SCREW

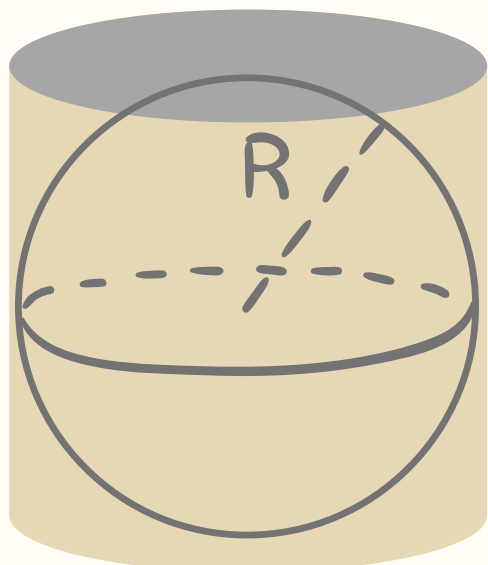
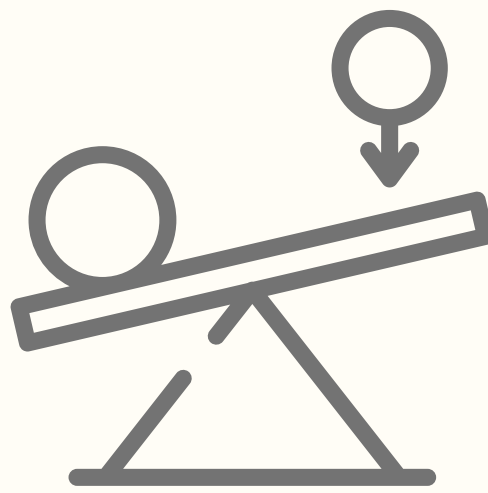
Upwards Movement

He has invented a device to lift water up from a well became known as the Archimedes Screw, and is still in use in many places today.

ARCHIMEDES' LEVER

"Give me a place to stand on, and I will move the Earth!"

A small force applied at the end of a long lever can create enough torque to move heavy loads on the other end of the lever. In his book *On the Equilibrium of Planes*, he proved the law of the lever using geometric reasoning.,



SPHERE ON A CYLINDER

The mark on his tomb

He find the Surface area and y-the Volume formulas of a sphere. And he proudly proved that, when a sphere and a cylinder have the same height and diameter, the sphere has 2/3 of the volume and surface area of the cylinder.

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FUTURE SOLAR PANELS

Giant Mirrors

A spectacular machine credited to Archimedes is the heat ray or the death ray. It is said to have used mirrors acting collectively as a parabolic reflector to burn ships attacking Syracuse.



DO NOT DISTURB MY CIRCLES

Last Words

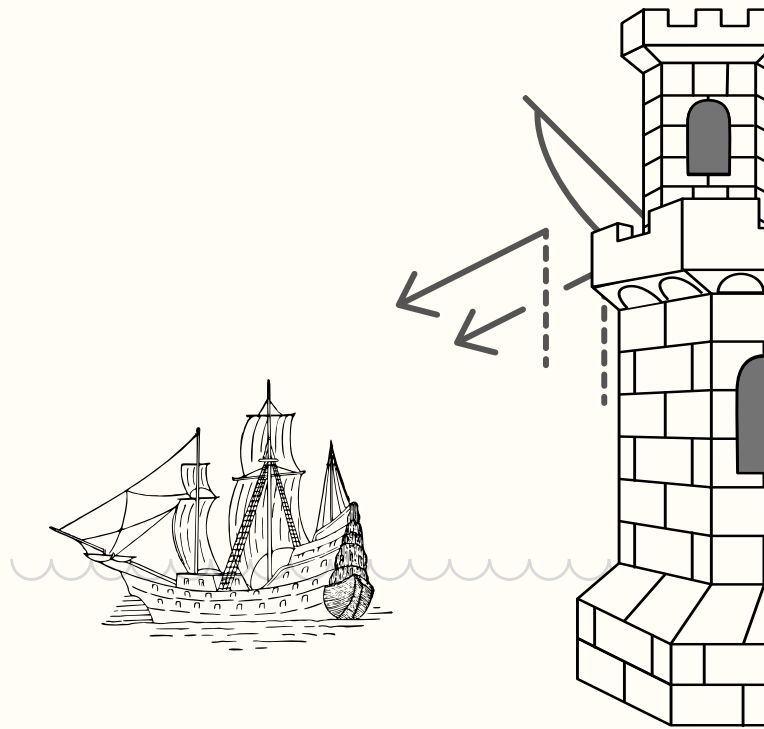
The last words attributed to Archimedes are "Do not disturb my circles", a reference to the circles in the mathematical drawing that he was supposedly studying when disturbed by the Roman soldier.



WAR MACHINES

Science Wars

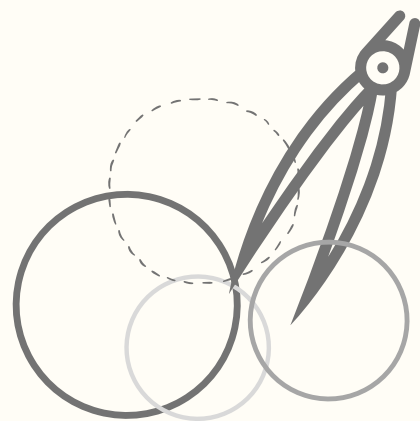
When the Romans attacked Syracuse, Archimedes invented weapons to defend the city like the Claw of Archimedes and giant catapults.



ARCHIMEDIAN SOLIDS

13 GEOMETRIC SOLIDS

In geometry, an Archimedean solid is a convex polyhedron with these properties;
Each face has to be a regular polygon
All the corners of the shape look the same.
The shape is neither a platonic solid, nor a prism, nor an antiprism.



"THE ONLY WAY TO LEARN IT IS TO DO IT."

ARCHIMEDES

212 B.C

