Inclined Planes and

Mechanical Advantage.

Mechanical advantage: is a number that tells you if a machine as helped you or not.

\*\*If the mechanical advantage is greater than 1.0 that means that the machine is helping you (or lowering the effort force).

Actual Mechanical Advantage (AMA for all machine) =

Resistance force / Effort force

Ideal Mechanical Advantage (IMA): disregards friction and is different for each simple machine.

I.Planes: ramps used to move objects to a specific height.

IMA for inclined planes =

the length of the ramp / the height.

Example:

10m 1m

IMA = 10 / 1 = 10 times easier to lift the object 1 meter.

The less steep that an inclined plane is the higher the IMA will be.