**Pulleys**

**&**

**Wheel and Axles.**

**Pulleys: usually made of a grooved wheel and axle with some kind of rope around the wheel.**

**IMA for pulleys: is figured by counting the number of times that the tension in the rope is changed. The more pulleys you use the higher the IMA.**

**Example:**

**1 N 2 2 N**

**IMA = 2 because the 2 ropes have different tensions.**

**Wheel and axles: are made of exactly that. The IMA is figured out by:**

**Diameter of the wheel / Diameter of the axle**

 **2m**

**.5 m**

**IMA = ??**

**2/.5 = 4 or 4 times easier.**