

CP - Oct 25

Bob

Marty 126 lbs

.85m Δ 1.2m

What does Bob weigh?

$$\underline{X (.85)} = \underline{126 \text{ lb} (1.2 \text{ m})}$$

$$X = \frac{126 \text{ lb} (1.2 \text{ m})}{.85 \text{ m}}$$

$$= 177.88 \text{ lbs}$$

$$MA = \frac{EA}{RA} = \frac{\text{Effort Arm}}{\text{Resistance arm}} = \frac{1.2 \text{ m}}{.85 \text{ m}}$$

$$= \boxed{1.41}$$

Effort force \times MA = resistance Force.

- What did the lever do?
1. Made your force larger
 2. changed the direction of the force.

Machines

- Lever
- Pulley
- wheel and axle
- Inclined plane
- Wedge
- screw



