

PULLEY POTPOURRI



Like other machines a pulley makes work easier. This is generally done by multiplying the input force. In each of the sections that follow, complete the pulley set-up and make your measurements and calculations. **In every case lift the weight by 10 cm.**

Part I: Use a single pulley. Lift the weight.

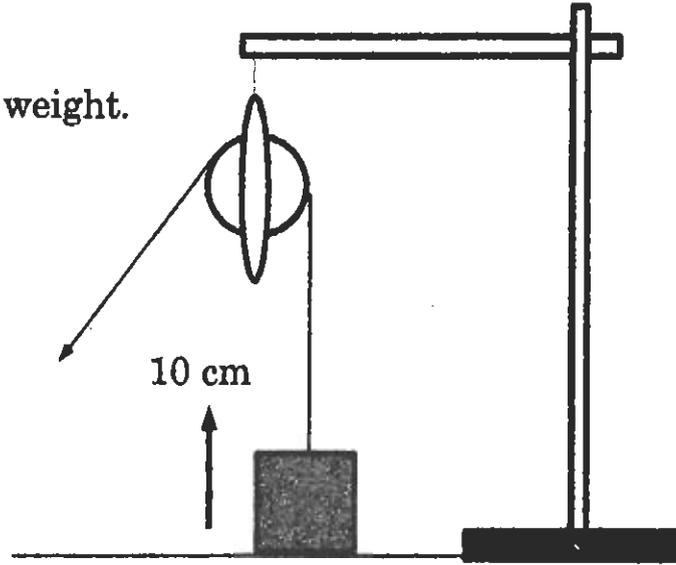
EFFORT DISTANCE: _____

Effort Force: _____

Resistance Distance: 10 cm

Resistance Force (weight): _____

Mechanical Advantage: _____



Part II: Use a single pulley. Lift the weight.

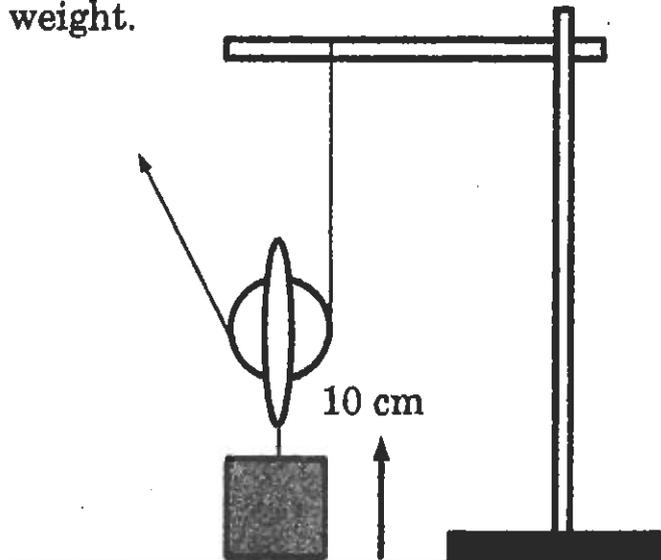
EFFORT DISTANCE: _____

Effort Force: _____

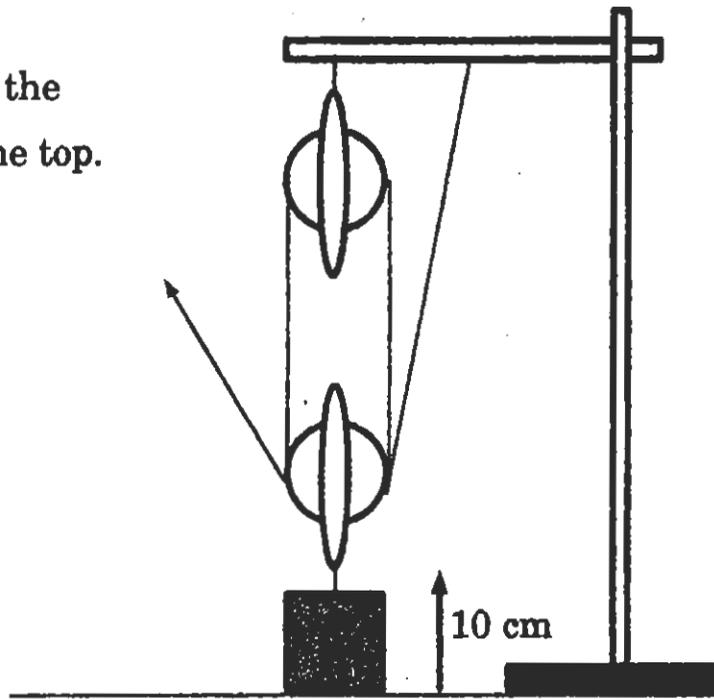
Resistance Distance: 10 cm

Resistance Force (weight): _____

Mechanical Advantage: _____



Part III: Use a double pulley on the bottom and a single pulley on the top.
Lift the weight.



EFFORT DISTANCE: _____

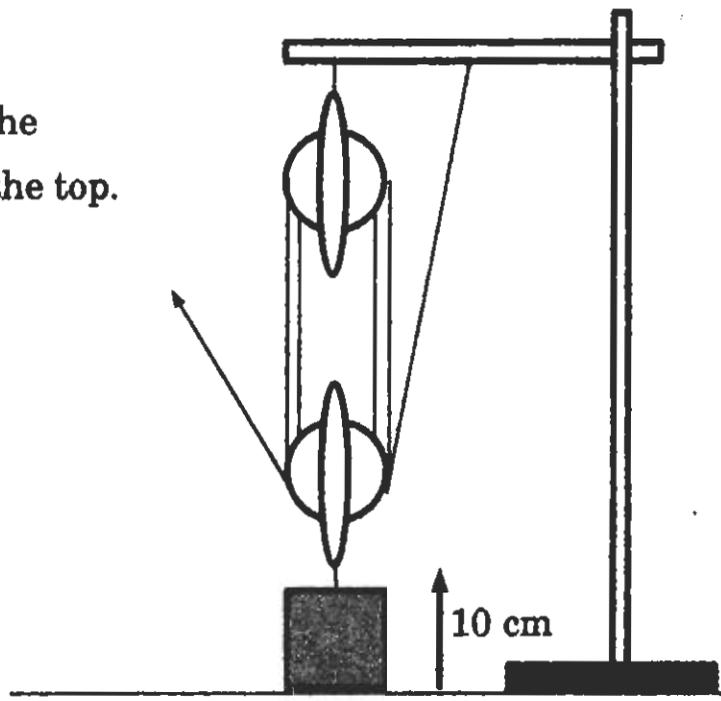
Effort Force: _____

Resistance Distance: 10 cm

Resistance Force (weight): _____

Mechanical Advantage: _____

Part IV: Use a triple pulley on the bottom and a double pulley on the top.
Lift the weight.



EFFORT DISTANCE: _____

Effort Force: _____

Resistance Distance: 10 cm

Resistance Force (weight): _____

Mechanical Advantage: _____

- 1) How did the work compare in each part above?
- 2) What did this machine multiply? How?
- 3) Of what benefit is the pulley set-up in part I?

