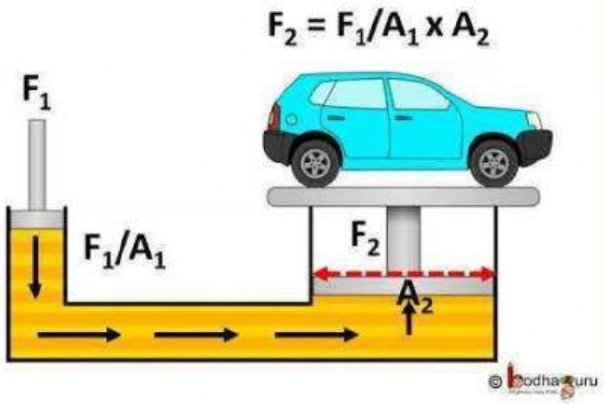
Pascal's principle



A hydraulic lift is used to lift a heavy machine that is pushing down on a 2.8 m^2 platform with a force of 3,700 N. what force must be exerted on a 0.072 m^2piston to lift the heavy machine?

List the Knowns: **List the unknowns:**

A1 =

A2 =

F1 =

F2 : ?

$$\frac{F1}{A1} = \frac{F2}{A2}$$

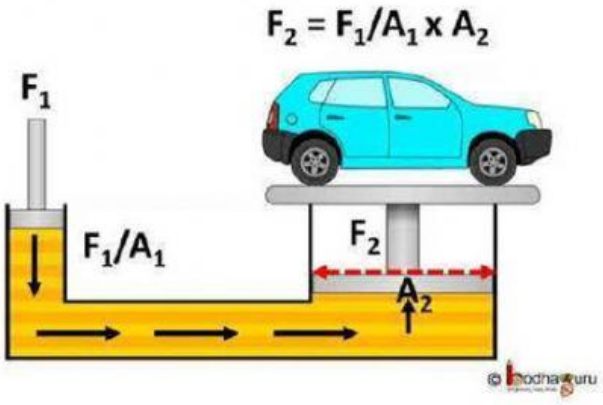
Pascal's principle

$$\frac{F1}{A2} = \frac{F2}{A1}$$

Answer:

LIVEWORKSHEETS

A car weighing 15,000 N is on a hydraulic lift platform measuring 10 m^2. What is the area of the smaller piston if a force of 1,100 N is used to lift the car?



List the Knowns: **List the unknowns:**

F1 =

A2 =

F2 =

A1 ?

Pascal's principle

$$\frac{F1}{A1} = \frac{F2}{A2}$$

$$\frac{F1}{A2} = \frac{F2}{A1}$$

Answer:

LIVEWORKSHEETS