

Pascal's principle

Total questions: 12

Worksheet time: 6mins

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Name Class Date

1. Pascal states that

- a) Pressure is force per unit area
- c) When force is applied, the pressure is transmitted equally through the fluid

2. Which object involving pascal principle

a)



- b) When velocity is higher, the pressure is lower
- d) Pressure transmitted is directly proportional to the force applied

b)



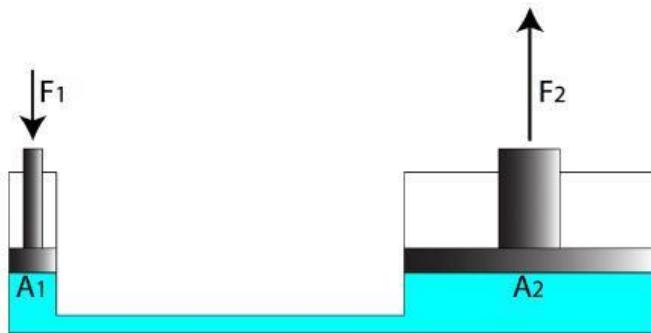
c)



d)



3.



Which comparison is correct

- a) $F_1 = F_2$
- b) $P_1 > P_2$
- c) $F_1 > F_2$
- d) $P_1 = P_2$

4. Pressure can be measured in Pascals (Pa) or Newtons per square meter.

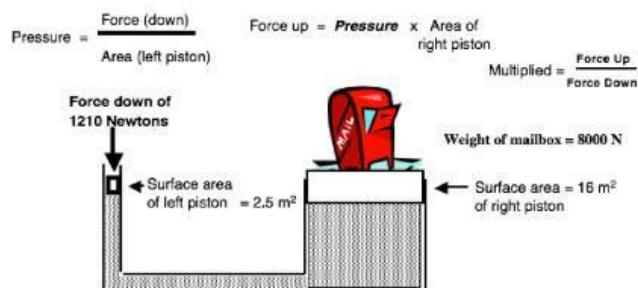
$$1 \text{ Pa} = 1 \text{ N/m}^2$$

- a) True
- b) False

5. As the area a force acts on increases, the force exerted on each unit of area

- a) increases
- b) decreases
- c) remains constant

6.



What is the pressure in the hydraulic fluid?

- a) 1210 N
- b) 484 N/m^2
- c) 8000 N
- d) 3025 N/m^2

7. What is the greatest benefit of using hydraulics?

- a) The multiplication of speed
- b) The multiplication of operating time
- c) The multiplication of fuel efficiency
- d) The multiplication of force

8. The basic idea behind any hydraulic system is very simple: Force that is applied at one point is transmitted to another point using _____

- a) A compressible fluid
- b) An incompressible fluid
- c) A cold compress
- d) A hot compress

9. The buoyant force acting on an object is equal to the...

- a) mass of the liquid displaced by the object
- b) weight of the fluid displaced by the object
- c) mass of the solid
- d) sum of the weight of the solid and liquid displaced

10. Archimedes Principle is the law of what?

- a) Buoyancy
- b) Fluids
- c) Mass
- d) Matter

11. The buoyancy force always opposes...

- a) Fire
- b) Water
- c) Gravity
- d) Air

12. what the principle from pascals' law

- a) Submarine
- b) hydraulic jack
- c) Ship
- d) kettle