RECOVERY TASK

Match the concept to its formula or meaning.

Concept	Letter	Meaning/ Formula
A. Buoyant force		1. A two-dimensional quantity representing amount or extent of surface.
B. Density		2. Fb= df. g. Vf
C. Area		3. How much space an object or substance takes up.
D. Pressure		4. Force divided by the area on which it acts.
E. Weight		5. The amount of mass per unit of volume.
F. Volume		6. m.g

From the following formula mark as true or false the statement below. If the statement is false, change it to make it true.

$$P = \frac{F}{A}$$

When there is more force, there is more pressure.
T( ) F( )
When the area increases, pressure increases.
T( ) F( )
F=a/P
T( ) F( )

Solve the exercises:

A hydraulic lift office chair has its seat attached to a piston with an area of 13.2 cm2. The chair is raised by exerting force on another piston, with an area of 3.12 cm2. If a person sitting on the chair exerts a downward force of 250 N, what force needs to be exerted on the small piston to lift the seat?

N

If an object floating on saltwater (1,03 g/cm3), displaces 3 cm3 of that liquid. Calculate the buoyant force.

N

A sphere with a diameter length of 7cm has a density of 0.85 g/cm^3. Work out the mass of the sphere.

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