

2. Pressure is defined as force per unit area or

$$P = F / A$$

We multiply both sides of the equation by the area to solve for the force as

$$F = P A$$

$$F = (300 \text{ Pa}) (0.5 \text{ m}^2)$$

$$F = 150 (\text{Pa}) \text{ m}^2 = 150 (\text{N} / \text{m}^2) \text{ m}^2$$

$$F = 150 \text{ N}$$