

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

$$F = P \times A$$

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

3. The weight of water in a glass is 4.9 N. If the water is exerting a pressure of 1700 Pa on the bottom of the glass, what is the area of the bottom of the glass?

Given

$$F = 4.9 \text{ N}$$

$$P = 1700 \text{ Pa}$$

$$A = ?$$

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

$$= \frac{4.9 \text{ N}}{1700 \text{ Pa}}$$

$$\frac{\text{N}}{\text{N/m}^2}$$

$$2.88 \times 10^{-3} \text{ m}^2$$

$$0.00288 \text{ m}^2$$