

Answer on Question #79520 – Math -Calculus

Question

Evaluate $\int_{V_1}^{V_2} p \cdot dV$.

Solution

$$\int_{V_1}^{V_2} p \cdot dV = p \int_{V_1}^{V_2} dV \quad (\text{say } p = \text{constant and } V = \text{variable})$$

$$= p (V_2 - V_1).$$

Answer: $p (V_2 - V_1)$.