

Answer on Question #79520 – Math -Calculus

Question

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

Solution

$$\begin{aligned}\int_{V_1}^{V_2} p \cdot dV &= p \int_{V_1}^{V_2} dV && \text{(say } p = \text{constant and } V = \text{variable)} \\ &= p (V_2 - V_1).\end{aligned}$$

Answer: $p (V_2 - V_1)$.