

$$1. \int_{-2}^2 (\int_0^6 3dy) dx =$$

$$\int_0^6 3dy =$$

$$3y|_0^6 = 18 \Rightarrow$$

$$\int_{-2}^2 (\int_0^6 3dy) dx =$$

$$\int_{-2}^2 18dx =$$

$$18x|_{-2}^2 =$$

$$36 + 36 = 2 \cdot 36$$

$$2. \int_0^3 (\int_0^5 5 - xdx) dy$$

$$\int_0^5 5 - xdx = 5x - \frac{x^2}{2} \Big|_0^5 = 25 - \frac{25}{2}$$

$$\int_0^3 25 - \frac{25}{2} dy =$$

$$(25 - \frac{25}{2})y|_0^3 =$$

$$3(25 - \frac{25}{2}) = \frac{75}{2}$$