

$$\int_0^{\pi} dy \int_{-1}^{\sin y} (2x - 3y + 2) dx =$$

Wenuratz R:

$$\int_{-1}^{\sin y} (2x - 3y + 2) dx =$$

$$\left[ \frac{2x^2}{2} - 3yx + 2x \right]_{-1}^{\sin y} =$$

$$= \sin^2 y - \underline{3y \sin y} + 2 \sin y - 1 - 3y + 2$$

$$\int_0^{\pi}$$

$$\cos 2y = \cos^2 y - \sin^2 y$$

$$1 = \cos^2 y + \sin^2 y$$

$$1 - \cos 2y = 2 \sin^2 y$$

$$\sin^2 y = \frac{1 - \cos 2y}{2}$$