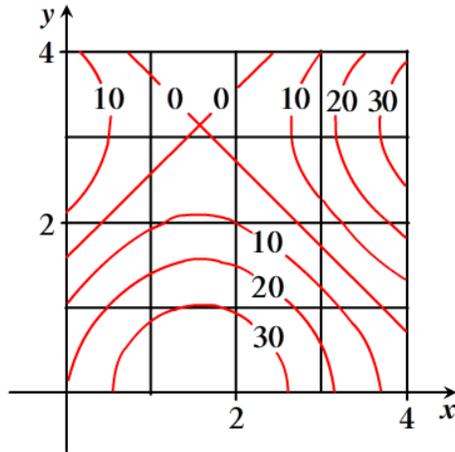


- 4) A contour map is shown for a function f on the square $R = [0, 4] \times [0, 4]$.
- Use the Midpoint Rule with $m = n = 2$ to estimate the value of $\iint_R f(x, y) dA$.
 - Estimate the average value of f .



- 5) Evaluate the double integral by first identifying it as the volume of a solid.
- $\iint_R 3 dA$, $R = \{(x, y) \mid -2 \leq x \leq 2, 1 \leq y \leq 6\}$
 - $\iint_R (4 - 2y) dA$, $R = [0, 1] \times [0, 1]$