Quiz 4 (front and back) Name: _____

Throughout, let $f(x, y) = 1 - xy^2$.

1. If $R = [0, 2] \times [-2, 4]$, use a Riemann sum to estimate the value of

$$\iint_R f(x, y)\, dA$$

with $m = 2$, $n = 3$, and sample points equal to the top left corners of the rectangle.

SOLUTION:

2. Find the exact value of

$$\iint_R f(x,y)\,dA$$

using iterated integrals/Fubini's theorem.

SOLUTION:

3. Find the exact value of

$$\iint_D f(x,y)\,dA$$

where D is the region in the first quadrant bounded by the y-axis and the curves $y = e^{x-4}$ and $y = 2 - e^{x-4}$.

SOLUTION: