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def trapezoidal_rule(x, y, n):
    h = x[1] - x[0] # Assuming uniform spacing
    sum_y = y[0] + y[-1]

    for i in range(1, n):
        sum_y += 2 * y[i]

    area = (h / 2) * sum_y
    return area

# Sample Data (time in hours, irradiance in W/m^2)
x = [6, 7, 8, 9, 10, 11, 12] # 6 AM to 12 PM (every hour)
y = [0, 120, 400, 600, 750, 800, 850] # Example irradiance values

n = len(x) - 1
energy = trapezoidal_rule(x, y, n)
print(f"Estimated solar energy: {energy:.2f} Wh/m^2")

```