#1) Use the Midpoint Rule with the given value of n to approximate the integral. Round the answer to four decimal places. Please be organized.

$$\int_0^8 \sin\sqrt{x}\, dx, \quad n=4$$

$$A \approx 2(f(1)) + 2(f(3)) + 2(f(5)) + 2(f(7))$$

$$1.68294 + 1.97405 + 1.57350 + .95154$$

$$\underline{\underline{6.1820}}$$

#2) Evaluate the integral

$$\int_0^1 (u+2)(u-3)\, du$$

$$\int_0^1 u^2 - u - 6\, dy$$

$$\frac{1}{3} - \frac{1}{2} - 6$$

$$\boxed{\frac{-37}{6}}$$