WB pg 22 KEY

3) $\frac{2-1}{2(4)}\left[f(\frac{4}{4}) + 2f(\frac{5}{4}) + 2f(\frac{6}{4}) + 2f(\frac{7}{4}) + f(\frac{8}{4})\right]$

$= \frac{21}{32} = .656$

5) $\int_1^2 2x - x^2\,dx \qquad x^2 - \frac{1}{3}x^3\Big]_1^2$

$(4 - \frac{8}{3}) - (1 - \frac{1}{3}) = (\frac{12}{3} - \frac{8}{3}) - (\frac{3}{3} - \frac{1}{3})$

$\frac{4}{3} - \frac{2}{3} = \boxed{\frac{2}{3}}$

6) $\int_{-\pi/2}^{\pi/2} \cos x\,dx \qquad \sin x\Big]_{-\pi/2}^{\pi/2} \qquad 1 - -1 = \boxed{2}$

7) $\int_1^9 2x \cdot x^{1/2}\,dx = 2\int_1^9 x^{3/2}\,dx = \frac{4}{5}x^{5/2}\Big]_1^9$

$\frac{4}{5}(9)^{5/2} - \frac{4}{5}(1)^{5/2} =$

$\frac{972}{5} - \frac{4}{5} = \boxed{\frac{968}{5}}$

8) $-161/20$

11) $1(10) + 2(8) + 2(11) + 4(17) + 5(20)$

$= 216$