

(b) Sample points = -1, 0, 1, 2
width of each interval = 1.

$$\begin{aligned}\text{Area} &= 1 \cdot [(-1)^2 + 5 + (0)^2 + 5 + (1)^2 + 5 + (2)^2 + 5] \\ &= 1 \cdot [6 + 5 + 6 + 9] \\ &= \boxed{26}\end{aligned}$$

(c) Average of (a) and (b) = $\frac{26+26}{2} = \boxed{26}$.

(d) Sample points = -1.5, -0.5, 0.5, 1.5
width of each interval = 1

$$\begin{aligned}\text{Area} &= 1 \cdot [(-1.5)^2 + 5 + (-0.5)^2 + 5 + (0.5)^2 + 5 + (1.5)^2 + 5] \\ &= 1 \cdot [7.25 + 5.25 + 5.25 + 7.25] \\ &= \boxed{25}\end{aligned}$$

10(a) Sample points = 1, 3, 5, 7

width of each interval = $\frac{9-1}{4} = 2$

$$\begin{aligned}\text{Area} &= 2 \cdot \left[\left(\frac{1}{1} + 2\right) + \left(\frac{1}{3} + 2\right) + \left(\frac{1}{5} + 2\right) + \left(\frac{1}{7} + 2\right) \right] \\ &= 2 \left[3 + \frac{7}{3} + \frac{11}{5} + \frac{15}{7} \right] \\ &= 2 \left[3 + 2.33 + 2.2 + 2.14 \right] \\ &= 2 \cdot (9.77) \\ &= \boxed{19.54}\end{aligned}$$