

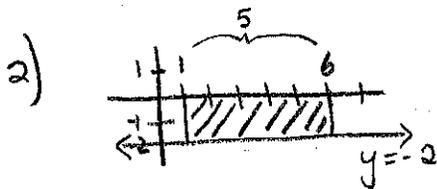
1) Evaluate $\sum_{i=1}^4 2(i-1)^2$

2) Find the area under $y = -2$ on $[1, 6]$.

3) Find $\int_1^3 e^x + 1 \, dx$.

SOL

1) $\sum_{i=1}^4 2(i-1)^2 = 2(0)^2 + 2(1)^2 + 2(2)^2 + 2(3)^2$
 $= 0 + 2 + 8 + 18 = \boxed{28}$



Area = $-2(6-1) = -10$

3) $\int_1^3 e^x + 1 \, dx = e^x + x \Big|_1^3$
 $= e^3 + 3 - (e^1 + 1)$
 $= e^3 - e^1 + 2$