

Task 2

$$a. \int_{-2}^4 (1-x-4x^3+2x^5) dx = x - \frac{x^2}{2} - x^4 + \frac{x^6}{3} \Big|_{-2}^4$$

$$= (4 - 8 - 256 + 4096) - (-2 - 1 - 16 + \frac{64}{3})$$

$$= 1104$$

$$B. \frac{(4 - (-2))}{2} \times (1789 + -29) = 5280$$

$$C. \begin{array}{cccccc} -2 & -0.5 & 21 & 2.5 & 4 \\ -29 & 1.9375 & -2 & 181.3125 & 1789 \end{array}$$

$$h = 1.5$$

$$I = \frac{1.5}{2} [-29 + 2(1.9375 + -2 + 181.3125) + 1789]$$

$$= 1516.875$$

$$D. \begin{array}{cccc} -2 & 1 & 2 & 4 \\ -29 & -2 & 3 & 1789 \end{array}$$

$$h = 3$$

$$I = \frac{3}{3} (-29 + 4 \times -2 + 1789) = 1752$$

$$E. \begin{array}{cccccc} -2 & -1 & 0 & 1 & 2 & 3 & 4 \\ -29 & 4 & 1 & -2 & 31 & 376 & 1789 \end{array}$$

$$h = 1$$

$$I = \frac{1}{3} (-29 + 4 \times (1 + 31) + 2(4 + -2 + 376) + 1789)$$

$$= 881.33$$

F.	-2	0	2	4
	-29	1	31	1789

$$h = 2$$

$$1 = \frac{6}{8} (-29 + 3(1 + 31) + 1789)$$

$$= 1392$$