Calculus
F 13 April 2012

RESET THE SESSION

SET THE PARTICIPANT LIST

PLUG IN THE RECEIVER

New topics (see diary)

Topics covered are in bounds

Boxed answers agree with TurningPoint answers

Points agree with TurningPoint points

Points total to 100

Cover the look ahead

QUIZ
FOLLOWS

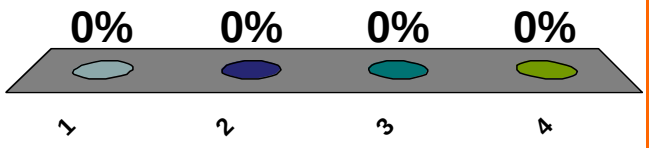
$$\frac{d}{dx}\left[\int_0^x (5t^3 + 2t - 1)\,dt\right]$$

(a) $\frac{5x^3}{3} + x^2 - x$

(b) $5t^3 + 2t - 1$

(c) $5x^3 + 2x - 1$

(d) none of the above



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

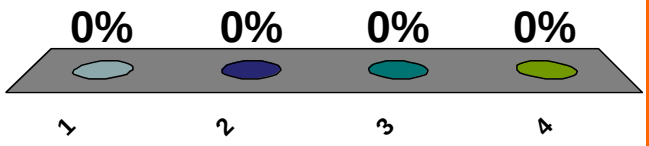
$$\triangle \left[\sum_{j=1}^{n} (5j^3 + 2j - 1) \right]$$

(a) $5n^3 + 2n - 1$

(b) $\frac{5(n+1)^2 n^2}{4} + n(n+1) - n$

(c) $5(n+1)^3 + 2(n+1) - 1$

(d) none of the above



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$$F'(t) = e^{t^2}$$

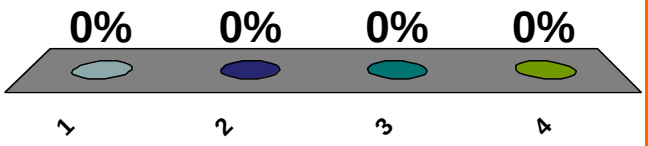
$$\frac{d}{dx}\left[\int_{x^2}^{x^5} e^{t^2}\, dt\right]$$

(a) $\frac{d}{dx}\left[(F(x^5)) - (F(x^2))\right]$

(b) $\frac{d}{dx}\left[(F(x))^5 - (F(x))^2\right]$

(c) $\frac{d}{dx}\left[(F(x^5))(5x^4) - (F(x^2))(2x)\right]$

(d) none of the above



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$$F'(t) = e^{t^2}$$

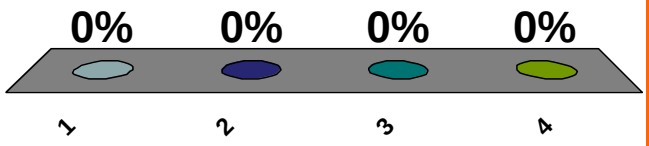
$$\frac{d}{dx}\left[(F(x^5)) - (F(x^2))\right]$$

(a) $(F'(x^5))(5x^4) - (F'(x^2))(2x)$

(b) $(F(x^5))(5x^4) - (F(x^2))(2x)$

(c) $(F'(x^5)) - (F'(x^2))$

(d) none of the above



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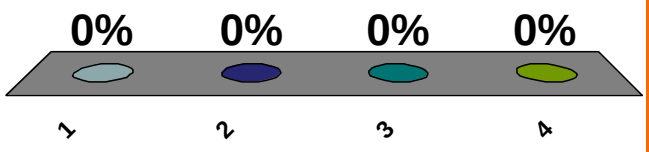
nth midpt Riem. sum for $\int_1^2 e^x\,dx$

(a) $\sum_{j=1}^{n} \left[\frac{1}{n}\right] \left[e^{1+(j/n)}\right]$

(b) $\sum_{j=1}^{n} \left[\frac{1}{n}\right] \left[e^{1+(j/n)-(1/(2n))}\right]$

(c) $\sum_{j=1}^{n} \left[\frac{1}{n}\right] \left[e^{1+(j/n)-(1/n)}\right]$

(d) none of the above



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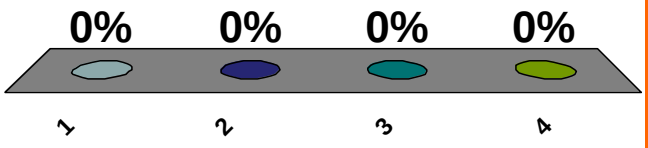
(a) $\displaystyle\sum_{j=0}^{n-1} \left[\frac{4}{n}\right] \left[(2+(4j/n))^5\right]$

nth midpt Riem. sum for $\displaystyle\int_2^6 x^5\,dx$

(b) $\displaystyle\sum_{j=0}^{n-1} \left[\frac{4}{n}\right] \left[(2+(4j/n)-(4/n))^5\right]$

(c) $\displaystyle\sum_{j=0}^{n-1} \left[\frac{4}{n}\right] \left[(2+(4j/n)+(4/(2n)))^5\right]$

(d) none of the above



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LOOK BACK (LOG DIFF)

log deriv of $(2 - \cos x)^{x^3+4}$

deriv of $(2 - \cos x)^{x^3+4}$

log deriv of $\dfrac{(x^4+3)^7 \sqrt[3]{2x^5-7}}{(\sin(x+4))(e^{x^4+8x-6})}$

deriv of $\dfrac{(x^4+3)^7 \sqrt[3]{2x^5-7}}{(\sin(x+4))(e^{x^4+8x-6})}$

LOOK BACK (LIN APPROX)

approx value of $\sqrt[4]{15.999}$

approx value of $\tan(\frac{\pi}{4} + 0.03)$

CURRENT (INT BY SUB)

$$\int_{8}^{27} x^2[\sin(x^3)]\ dx$$

SAVE THE SESSION DATA

RETURN TO PRESENTATION