

Calculus

W 18 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

thickened disk vol. at x

$$y = \sqrt{1 - x^2}$$

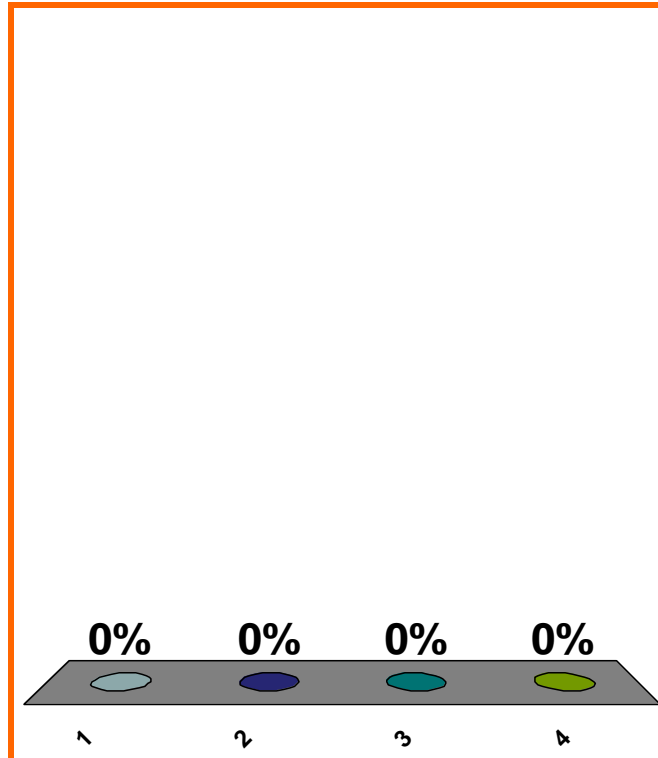
about x -axis

(a) $\pi (1 - x^2) dx$

(b) $\pi (\sqrt{1 - x^2})$

(c) $\pi (\sqrt{1 - x^2}) dx$

(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

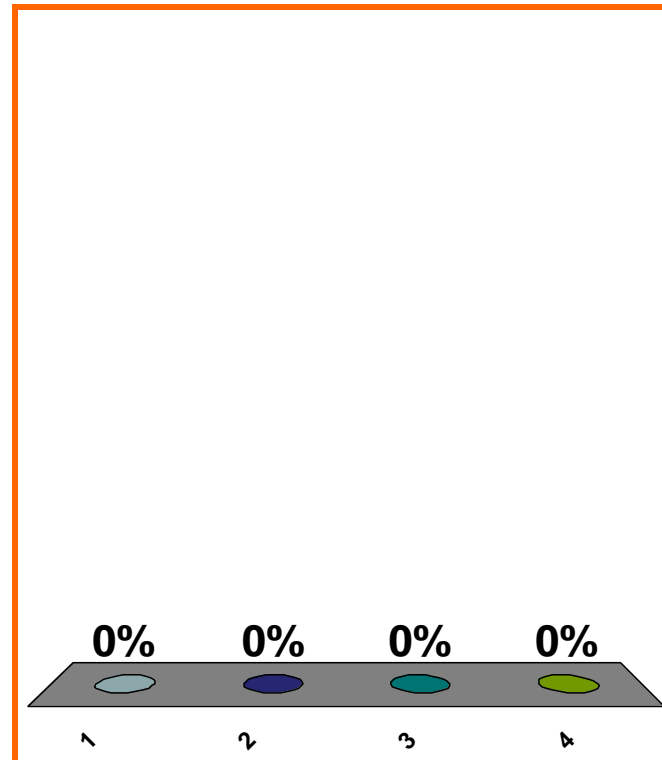
$$\frac{d}{dx} \left[\int_0^x (5t^3 + 2t - 1) dt \right]$$

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

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

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

(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

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

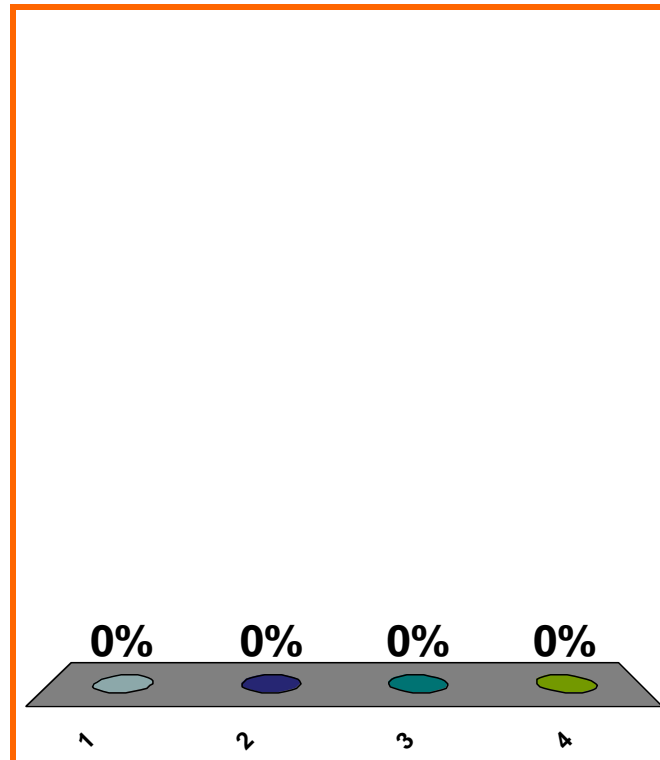
$$\frac{d}{dx} \left[\int_{x^2}^{x^5} e^{t^2} dt \right]$$

(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



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

0 of 5

Topic 0620

20 pts

7

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

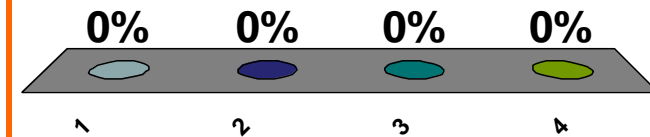
n th midpt Riem. sum

$$\text{for } \int_2^6 x^5 dx$$

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

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

(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

0 of 5

Topic 0590

20 pts

8

n th midpt Riem. sum

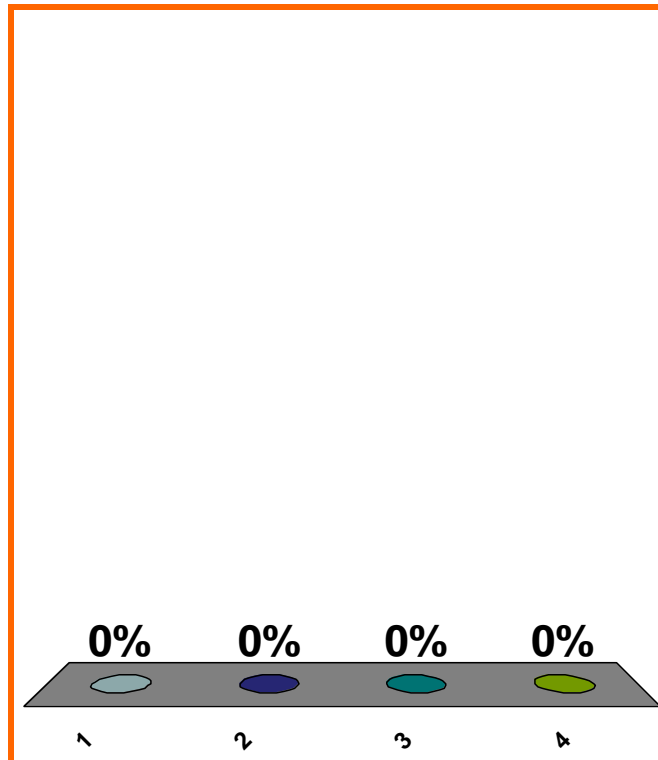
for $\int_1^2 e^x dx$

(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



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

CURRENT
(VOL OF SOLID OF REV)

disk and washer methods

SAVE THE
SESSION
DATA

RETURN TO
PRESENTATION