

Calculus

M 23 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

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

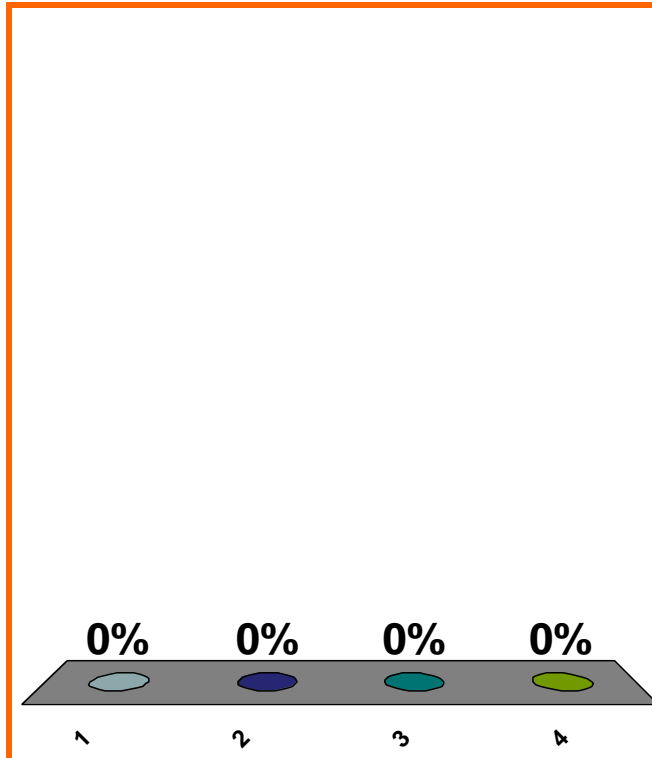
about x -axis

(a) $\pi \left(\sqrt{1 - x^2} \right) dx$

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

(c) $\pi \left(1 - x^2 \right) dx$

(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

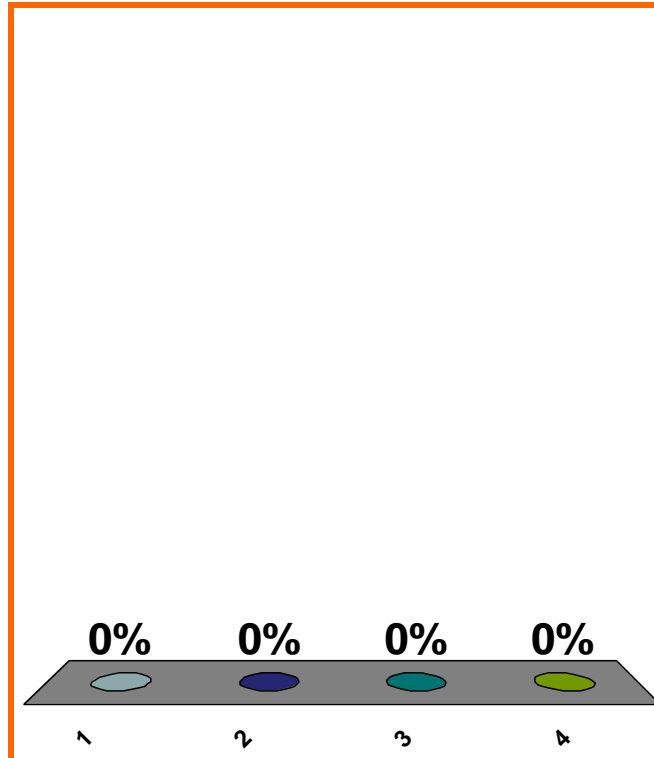
thickened shell vol. at x
 $y = \sqrt{1 - x^2}$
about y -axis

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

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

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

(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

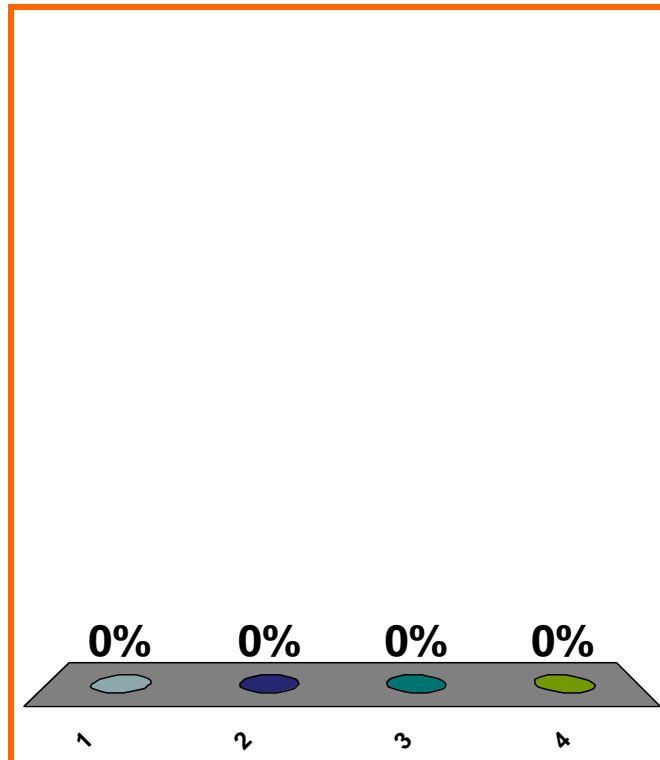
$$(a) \left[(1 + x^2)^x \right] \left[\frac{d}{dx} (x \cdot \ln(1 + x^2)) \right]$$

$$\frac{d}{dx} \left[(1 + x^2)^x \right]$$

$$(b) x(2x)^{x-1}$$

$$(c) x(1 + x^2)^{x-1} \left[\frac{d}{dx} (1 + x^2) \right]$$

(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
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0 of 5

Topic 0400

20 pts

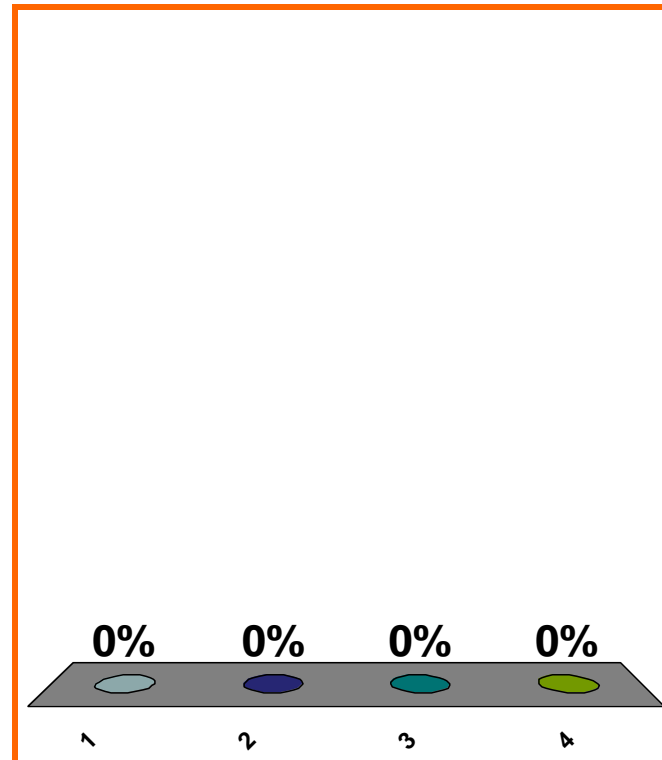
$$\lim_{x \rightarrow 0} \left[\frac{6x^8 + 7x^4 - 8x^3}{7x^5 - 2x^4 + 9x^3} \right] = ??$$

(a) DNE

(b) $-8/9$

(c) $6/7$

(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 0200

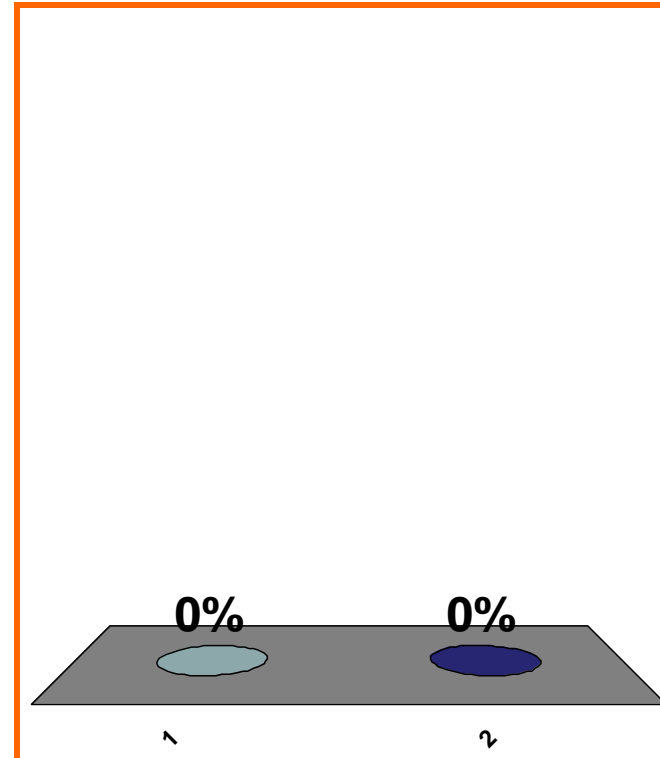
10 pts

T or F:

Any local max or local min is at a critical number.

(a) True

(b) False



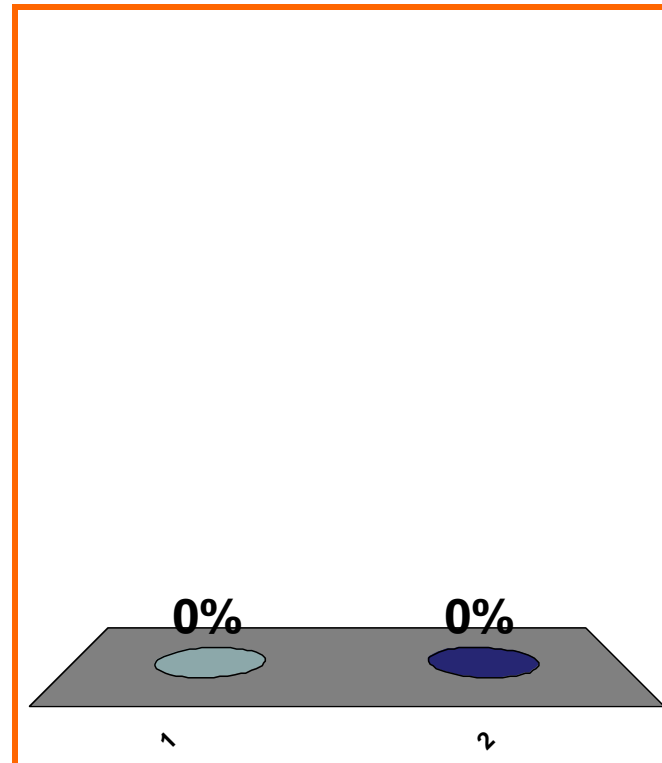
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

T or F:

If $f'' > 0$ on I ,
then f is cc up on I .

(a) True

(b) False



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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0 of 5

Topic 0470

10 pts

10

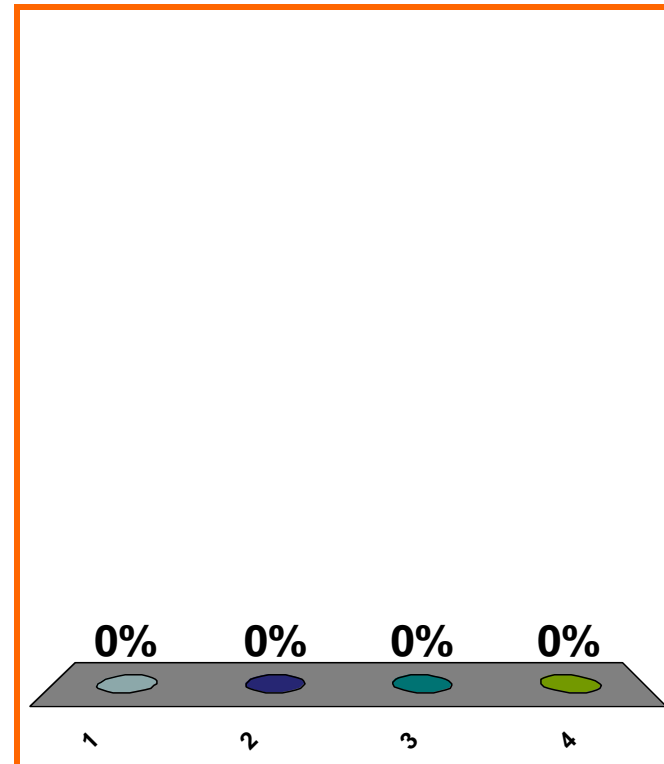
$$[d/dx][\tan(xy)] = ??$$

(a) $-\sec^2(xy)[y + xy']$

(b) $\sec^2(xy)[y + xy']$

(c) $-\sec^2(xy)[y + x]$

(d) none of the above



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SAVE THE
SESSION
DATA

RETURN TO
PRESENTATION