Calculus
F 9 September 2011
RESET THE SESSION

SET THE PARTICIPANT LIST
Sure that the correct answers have been entered into Turning Point???

YES
QUIZ
FOLLOWS
T or F:
\[ \exists x \in \mathbb{R} \text{ s.t. } x^2 = -4 \]

(a) True

(b) False
(a) True
(b) False

T or F:
\[ \forall x < 0, \sqrt{x^2} = -x \]
T or F: 

\((-1, 1)\) is open

(a) True

(b) False
T or F:
[2, 5] is closed

(a) True
(b) False
Which is a linear combination of \(1, x, x^2\)?

(a) \(\sin x\)

(b) \(2 + 8x + 7x^2\)

(c) \(e^x\)

(d) none of the above
Which is a linear combination of 1, \(x\), \(x^2\)?

(a) \(\sin x\)

(b) \(2 - x\)

(c) \(e^x\)

(d) none of the above
Quartic coefficient in $3x^5 + x^4 - x^3 + 8x + \pi$

(a) 1
(b) 3
(c) -1
(d) none of the above
Leading coefficient in $3x^5 + x^4 - x^3 + 8x + \pi$

(a) 1
(b) 3
(c) $-1$
(d) none of the above
(a) $5 - x$

(b) $|5 - x|$

(c) $x - 5$

(d) none of the above
distance from \( a \) to \( b \)?

(a) \( a - b \)

(b) \( b - a \)

(c) \( a + b \)

(d) none of the above

Correct answer: \(|a - b|\)
To get graph of $y + 1 = x^3$, move graph of $y = x^3$ . . .

(a) right 1
(b) left 1
(c) down 1
(d) none of the above
To get graph of \( y^2 = \sin(x + \pi) \), move graph of \( y^2 = \sin(x) \) . . .

(a) right \( \pi \)

(b) left \( \pi \)

(c) down \( \pi \)

(d) none of the above
To get graph of \( y^2 = \sin(x - \pi) \), move graph of \( y^2 = \sin(x) \) ...

(a) right \( \pi \)

(b) left \( \pi \)

(c) down \( \pi \)

(d) none of the above
To get graph of \((y + \pi)^2 = \sin(x)\), move graph of \(y^2 = \sin(x)\) ... 

(a) right \(\pi\)

(b) left \(\pi\)

(c) down \(\pi\)

(d) none of the above
\[
\sum_{j=2}^{4} j^3 = ??
\]

(a) \((2 + 3 + 4)^3\)

(b) \((1 + 2 + 3 + 4)^3\)

(c) \(2^3 + 3^3 + 4^3\)

(d) none of the above
(a) \( \frac{\sqrt{2}}{2} \)

(b) \( \frac{\sqrt{3}}{2} \)

(c) \( \frac{1}{2} \)

(d) none of the above
arcsin(\(\sqrt{3}/2\)) = ??

(a) \(\pi/3\)

(b) \(\pi/4\)

(c) \(\pi/6\)

(d) none of the above
(a) $2t$

(b) $t/2$

(c) $t^2$

(d) none of the above
from position 5 to position 9
from time 3 to time 11
average velocity = ??

(a) 2
(b) 4
(c) 8
(d) none of the above

Correct answer: 1/2
tangent slopes for $y = x^2$
additivity of error

LOOK AHEAD

differentiate polynomials
differentiate all 6 trig functions
product rule
SAVE THE SESSION DATA

RETURN TO PRESENTATION