RESET THE SESSION

SET THE PARTICIPANT LIST

PLUG IN THE RECEIVER
Boxed answers agree with TurningPoint answers
Points agree with TurningPoint points
Points total to 100
Topics covered are in bounds
QUIZ
FOLLOWS
\[
\frac{d}{dx} \left[ x^{3/2} \right] \quad x \neq 0
\]

(a) \( x^{1/2} \)

(b) \( \frac{x^{1/2}}{1/2} \)

(c) \( (3/2)x^{1/2} \)

(d) none of the above
\[ \frac{d}{dx} \left[ 7x^2 + 4x - 1 \right] = ?? \]

(a) \( 7x + 4 \)

(b) \( 7x^3 + 4x^2 - x \)

(c) \( 14x + 4 \)

(d) none of the above
\[ f(x) = x^3, \quad f'(x) = 3x^2 \]

eq’n of tan. line at (2, 8)

(a) \( y - 2 = 3x^2(x - 8) \)

(b) \( y - 8 = 3x^2(x - 2) \)

(c) \( x - 8 = 3x^2(y - 2) \)

(d) none of the above

Correct: \( y - 8 = 12(x - 2) \)
\[ \lim_{{x \to -\infty}} \left[ \frac{\sqrt{x^2 + 1}}{3x} \right] = ?? \]

(a) \(-1/3\)

(b) \(1/3\)

(c) DNE

(d) none of the above
\[
\lim_{x \to 5} \left( \frac{3x^3 - 2x + 8}{x - 5} \right)
\]

(a) \((3)(5^3) - (2)(5) + 8\)

(b) \(-\infty\)

(c) \(\infty\)

(d) none of the above

**Correct answer: DNE**
\[ \lim_{{x \to -\infty}} \left[ \frac{100x^3 + 2x - 1}{x^4 - x^3 + x^2 + 1} \right] = ?? \]

(a) \(\infty\)

(b) \(-\infty\)

(c) 0

(d) none of the above
\[
\lim_{{x \to -\infty}} \left[ \frac{100x^3 + 2x - 1}{x + 1} \right] = ??
\]

(a) 100

(b) \(-\infty\)

(c) \(\infty\)

(d) none of the above
\[ \ln 0 = ?? \]

(a) 0
(b) DNE
(c) 1
(d) none of the above
\[
\log_{10}(0.01) = \text{??} \\
\]

(a) \(-2\)

(b) \(-1\)

(c) \(1\)

(d) **none** of the above
(a) True

(b) False

T or F:

\( f \) incr. on (2,3)

\[ \Rightarrow f' > 0 \text{ on (2,3)} \]
(a) True

(b) False
(a) True

(b) False

T or F:

\( f \) incr. on \((2, 3)\)

\( f \) diff. on \((2, 3)\)

\( f' \geq 0 \) on \((2, 3)\)
(a) True

(b) False

T or F:

\[ f' > 0 \text{ on } (2,3) \]

\[ \Rightarrow f \text{ incr. on } (2,3) \]
\[
d\frac{d}{dx}[\cos 7] = ??
\]

(a) 0  

(b) \sin 7  

(c) \(-\sin 7\)  

(d) none of the above
\[
\frac{d}{dx} \left[ (e^8)(\sin 3) \right] = ??
\]

(a) \((e^8)(\cos 3)\)

(b) \((e^8)(\sin 3) + (e^8)(\cos 3)\)

(c) 0

(d) none of the above

0 of 5
\[
\frac{d}{dx} [(\ln 8)(\sin 3)] = ??
\]

(a) \((1/8)(\cos 3)\)
(b) 0
(c) \((1/8)(\sin 3) + (\ln 8)(\cos 3)\)
(d) none of the above
\[
\frac{d}{dx} \left[ 7^{1/2} \right] = ??
\]

(a) DNE

(b) \([1/2] \left[ 7^{-1/2} \right]\]

(c) \(7^{1/2}(\ln 7)\)

(d) none of the above

Correct answer: 0
\[
\frac{d}{dx} \left[ x^{1/2} \right] = ??
\]

(a) DNE

(b) \([1/2] \left[ x^{-1/2} \right]\)

(c) \(x^{1/2}(\ln x)\)

(d) none of the above
(a) DNE

(b) $\frac{1}{5}$

(c) 0

(d) none of the above
\[
\frac{d}{dx} [(\ln 5)x] = ??
\]

(a) \ln 5

(b) 0

(c) x/5

(d) none of the above
\[ \frac{d}{dx} \left[ e^{-2} \right] = ?? \]

(a) 0
(b) \(-2e^{-2}\)
(c) \(-e^{-2}\)
(d) none of the above
\[
\frac{d}{dx} \left[ e^{-2x} \right] = ??
\]

(a) 0

(b) \(-2e^{-3x}\)

(c) \(e^{-2}\)

(d) none of the above
SAVE THE SESSION DATA
RETURN TO PRESENTATION
additivity of error
homogeneous vs. inhomogeneous
homog. linear polynomial in $x, y, z$

LOOK AHEAD

$d/dt$ and $d/ds$
differentiation
differentiation w.r.t. $x$ of expr. with $y$
log diff