Calculus
W 30 January 2013
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
(a) \((3)(5^3) – (2)(5) + 8\)

(b) \(-\infty\)

(c) \(\infty\)

(d) none of the above

\[
\lim_{x \to 5} (3x^3 - 2x + 8)
\]
\[ \lim_{{x \to 5}} \left( \frac{3x^3 - 2x + 8}{x - 4} \right) \]

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

(b) \(-\infty\)

(c) \(\infty\)

(d) none of the above
\[
\lim_{x \to 0} \frac{3x^3 + 2x}{x} = ??
\]

(a) 0

(b) 2

(c) 3

(d) none of the above
\[
\lim_{x \to 2} f(x) = -\infty
\]

(a) \(x \approx 2, \ x \neq 2 \implies f(x) \text{ very neg}

(b) \(x \approx 2, \ x \neq 2 \implies f(x) \text{ very pos}

(c) \(x \approx 2, \ x < 2 \implies f(x) \text{ very neg}

(d) none of the above
\( x^2 + 3\sqrt{x} + 1 \) is ??

(a) polynomial

(b) rational, not polynomial

(c) algebraic, not rational

(d) none of the above
END
QUIZ
END
CLASS
\[
\frac{(q^2 - 1)(3q^3 - 2q^2 + q - 7)}{q^2 - 1}
\]

is ... 

(a) a polynomial in \( q \)
(b) rational, nonpolynomial in \( q \)
(c) transcendental in \( q \)
(d) none of the above
(a) polynomial

(b) rational, not polynomial

(c) algebraic, not rational

(d) none of the above

\[ |x| = \sqrt{x^2} \]

\[ |x| \text{ is ??} \]
\(x^2 + 3x + 1\) is ??

(a) polynomial
(b) rational, not polynomial
(c) algebraic, not rational
(d) none of the above
\[ x^2 + 3\sqrt{x} + 1 \text{ is } \text{??} \]

(a) polynomial

(b) rational, not polynomial

(c) algebraic, not rational

(d) none of the above
\( \sin x \) is ??

(a) polynomial

(b) rational, not polynomial

(c) algebraic, not rational

(d) none of the above

Correct answer: transcendental
(a) polynomial

(b) rational, not polynomial

(c) algebraic, not rational

(d) none of the above
(a) polynomial

(b) rational, not polynomial

(c) algebraic, not rational

(d) none of the above

Correct answer: transcendental
\[ \forall x \in \mathbb{R}, \quad \frac{3x^3 + 2x}{x} = 3x^2 + 2 \]

(a) True

(b) False
\[
\frac{3x^3 + 2x}{x}
\]

is ... 

(a) a polynomial in \(x\)

(b) rational in \(x\)

(c) transcendental in \(x\)

(d) none of the above
\[
\left[ \frac{3x^3 + 2x}{x} \right]_{x \to 0} = ??
\]

(a) 0
(b) 2
(c) 3
(d) none of the above

Correct answer: DNE
\[ \lim_{x \to 0} \frac{3x^3 + 2x}{x} = \, ?? \]

(a) 0

(b) 2

(c) 3

(d) none of the above
distance from 9 to 7?

(a) 2

(b) −2

(c) 4

(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: \( |a - b| \)
SAVE THE SESSION DATA

RETURN TO PRESENTATION