Unit 2 - Pre-requisite Assignment

Assignment 0

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. Due on 2018-07-30, 23:59 IST.

1) The above figure shows $x(t)$. The waveform consists of straight line segments.

What is $dx/dt$ at $t = 2.5$?

(The answer must be the value of $dx/dt$. Round off fractional answers to one decimal place.)

(Additional exercise: Sketch $dx/dt$ for $0 \leq t \leq 5$)

No, the answer is incorrect.
Score: 0

Accepted Answers:
(Type: Numeric) -5

1 point
The above figure shows $x(t)$. The waveform consists of straight line segments.

What is $\int_{0}^{3.5} x(t)\,dt$?

(The answer must be the value of the integral. Round off fractional answers to one decimal place.)

(Additional exercise: Sketch $\int_{0}^{t} x(\tau)\,d\tau$ for $0 \leq t \leq 5$)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 2.5
The figure above shows $x(t)$. Which of the choices below best represents $y(t) = \int_0^t x(\tau)d\tau$?

A) 

B) 

C) 

D) 

No, the answer is incorrect.
Score: 0
Accepted Answers: A
The figure above shows $x(t)$. Which of the choices below best represents $y(t) = \frac{dx}{dt}$?

A)

B)

C)

D)

No, the answer is incorrect.
Score: 0
Accepted Answers:

D

5)
The figure above shows \( x(t) \). Which of the choices below best represents \( y(t) = \int_0^t x(\tau) d\tau \)?

A) 

B) 

C) 

D) 

No, the answer is incorrect.
Score: 0
Accepted Answers:
\( D \)
6)
The figure above shows $x(t)$. Which of the choices below best represents $y(t) = dx/dt$?

- A)
- B)
- C)
- D)

- A
- B
- C
- D

No, the answer is incorrect.
Score: 0
Accepted Answers: 
A

1 point
The figure above shows $x(t)$. Which of the choices below best represents $y(t) = dx/dt$?

A) 
B) 
C) 
D) 

No, the answer is incorrect.
Score: 0
Accepted Answers:
C

8)
The figure above shows $x(t)$. Which of the choices below best represents $y(t) = \int_{0}^{t} x(\tau) d\tau$?

A)  

B)  

C)  

D)

No, the answer is incorrect.
Score: 0
Accepted Answers: 
B
\[
A = \begin{bmatrix}
1 & 2 \\
3 & 4
\end{bmatrix}
\]

Its inverse \( B = A^{-1} \) is

\[
B = \begin{bmatrix}
b_{11} & b_{12} \\
b_{21} & b_{22}
\end{bmatrix}
\]

What is the value of \( b_{11} \)?

(The answer must be the value of \( b_{22} \). Round off fractional answers to one decimal place.)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) -2

10

\[
A = \begin{bmatrix}
1 & 2 \\
3 & 4
\end{bmatrix}
\]

Its inverse \( B = A^{-1} \) is

\[
B = \begin{bmatrix}
b_{11} & b_{12} \\
b_{21} & b_{22}
\end{bmatrix}
\]

What is the value of \( b_{12} \)?

(The answer must be the value of \( b_{22} \). Round off fractional answers to one decimal place.)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 1
$$A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$$

Its inverse $B = A^{-1}$ is

$$B = \begin{bmatrix} b_{11} & b_{12} \\ b_{21} & b_{22} \end{bmatrix}$$

What is the value of $b_{21}$?

(The answer must be the value of $b_{22}$. Round off fractional answers to one decimal place.)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 1.5

$$A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$$

Its inverse $B = A^{-1}$ is

$$B = \begin{bmatrix} b_{11} & b_{12} \\ b_{21} & b_{22} \end{bmatrix}$$

What is the value of $b_{22}$?

(The answer must be the value of $b_{22}$. Round off fractional answers to one decimal place.)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) -0.5