

Question 1

Not yet  
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1.00Flag  
question

The minimum value of the signal:  $x(t) = [ 524 \Delta(t / 68) + 131 \operatorname{sgn}(t) ] \operatorname{rect}(t / 408)$  is: (if you ever need it, consider  $u(0) = 1$ )

Answer:

POWERUNIT

Next page

Time left 0:06:21

Question **2**

Not yet  
answered

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question

The value of:  $x(t) = [ 524 \Delta(t / 68) + 131 \operatorname{sgn}(t) ] \operatorname{rect}(t / 408)$  at time  $t = 136$  is: (if you ever need it, consider  $u(0) = 1$ )

Answer:



Previous page

Next page

Time left 0:05:08

Question 4

Not yet answered

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The signal:  $x(t) = [ 524 \Delta(t / 68) + 131 \operatorname{sgn}(t) ] \operatorname{rect}(t / 408)$  is? Please answer: 34 if it is "continuous-time", 35 if it is "discrete-time", 36 if it is "continuous and discrete-time", 37 if it is "continuous or discrete-time", 38 if it is "continuous-time sometimes", 39 if it is "discrete-time sometimes", or 40 if it is invalid signal.

Answer:

POWERUNIT

Previous page

Next page

Time left 0:03:49

Question **5**

Not yet  
answered

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The value of:  $x(t) = [ 524 \Delta(t / 68) + 131 \operatorname{sgn}(t) ] \operatorname{rect}(t / 408)$  at time  $t = -17$  is: (if you ever need it, consider  $u(0) = 1$ )

Answer:



Previous page

Finish attempt ...

Time left 0:01:19

Question **3**

Answer saved

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Given a point  $(t_1, x_1) = (5.5, 92.8)$  on the linear line  $x(t) = m t + -57.6$ , the slope of this linear line is:

Answer:



Previous page

Next page

Time left 0:13:26

Question 1

Not yet  
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For the signal  $x(t) = 20.6 e^{(j 40 t)} e^{(-j 0.67)} + 20.6 e^{(-j 40 t)} e^{(j 0.67)} - j 15.05 e^{(j 10 t)} + j 15.05 e^{(-j 10 t)} + \cos(25 t)$ , the trigonometric Fourier series coefficient  $b_8$  is:

Answer:

POWERUNIT

Next page

## Question 2

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questionTo draw the signal  $x(32t)$  you:

- Shift  $x(t)$  to the left by 32
- Expand  $x(t)$  vertically by a factor of 32
- Compress  $x(t)$  vertically by a factor of 32
- None of the choices
- Compress  $x(t)$  horizontally by a factor of 32
- Shift  $x(t)$  to the right by 32
- Shift  $x(t)$  up by 32
- Expand  $x(t)$  horizontally by a factor of 32

Time left 0:08:08

Question **3**

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question

For the signal  $x(t) = 20.6 e^{(j 40 t)} e^{(-j 0.67)} + 20.6 e^{(-j 40 t)} e^{(j 0.67)} - j 15.05 e^{(j 10 t)} + j 15.05 e^{(-j 10 t)} + \cos(25 t)$ , the compact Fourier series coefficient  $c_{-2}$  is:

Answer:

Next page



## Question 4

Not yet  
answeredMarked out of  
1.00Flag  
questionThe operation  $x(-t)$  is known as:

- Amplitude reversal
- Time shifting
- None of the choices
- Amplitude shifting
- Time scaling
- Time reversal
- Amplitude scaling
- Invalid operation

Time left 0:06:05

Question 5

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answered

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For the signal  $x(t) = 20.6 e^{j 40 t} e^{-j 0.67} + 20.6 e^{-j 40 t} e^{j 0.67} - j 15.05 e^{j 10 t} + j 15.05 e^{-j 10 t} + \cos(25 t)$ , the compact Fourier series coefficient angle  $\theta_{-8}$  (in radians between  $[-3.14159, 3.14159]$ ) is:

Answer:

Finish attempt ...

Question 1

Not yet answered

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The number  $(172 + j101.9)$  is called:

- Invalid number equal 0
- Imaginary number and can be called complex number
- Complex conjugate
- Imaginary number but cannot be called complex number
- Complex number only
- Real number and can be called complex number
- Imaginary part but cannot be called complex number
- Real number but cannot be called complex number

[Clear my choice](#)

Question 2

Not yet  
answered

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question

We mentioned several "Computer Engineering" topics where you will need the mathematical skills acquired in this course. The following is NOT one of them:

- Convolutional Neural Networks
- Image processing
- Sending video from YouTube
- Parallel processing
- Image recognition
- Cryptography
- Video compression
- Artificial Intelligence



Question 3

Not yet  
answered

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1.00

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question

The author(s) of the required textbook for this course are (remember that this is an open book/open notes exam):

- B.P. Lathi and Oktay Alkin
- B.P. Lathi and Roger Green
- Matthew N. O. Sadiku and B.P. Lathi
- Matthew N. O. Sadiku and Warsame Hassan Ali
- Alan S. Willsky and S. Hamid
- Hwei P Hsu and Roger Green
- Charles L. Phillips, John Parr and Eve Riskin
- Charles L. Phillips and S. Lathi

Question 4

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answered

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For  $e^{-(149.7)j} = a + j \sin(b)$ , the value of  $b$  is:

Answer:

POWERUNIT

Time left 0:12:47

Question 1

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For the signal  $x(t) = \text{rep}_{157} [ 106 \text{ rect} ( ( t - 10.99 ) / 54.95 ) ]$ , the trigonometric Fourier series coefficient  $b_{-3}$  is:

Answer:

POWERUNIT

Next page

Time left 0:12:14

Question **2**

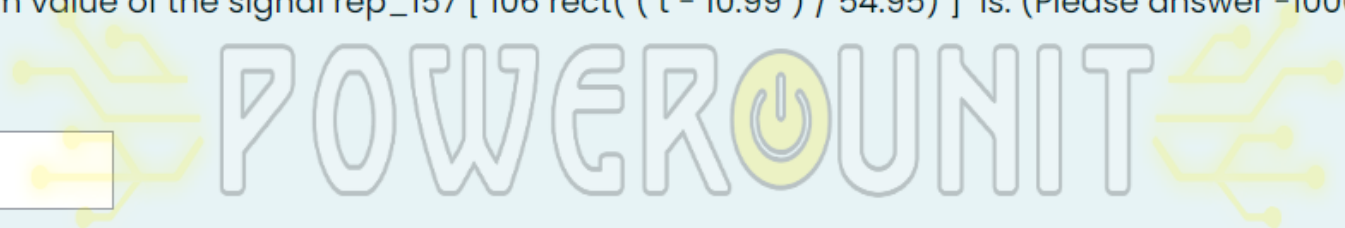
Not yet  
answered

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The minimum value of the signal  $\text{rep\_157} [ 106 \text{ rect}( ( t - 10.99 ) / 54.95 ) ]$  is: (Please answer -100035 if it is -infinity)

Answer:



Previous page

Next page



Time left 0:08:34

Question **3**

Not yet  
answered

Marked out of  
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For  $x(t) = \text{rep}_{157} [ 106 \text{ rect} ( ( t - 10.99 ) / 54.95 ) ]$ , the signal  $x(t)$  is positive value for an interval of time equal to (during one period):

Answer:



Previous page

Next page

Time left 0:07:26

Question 4

Not yet  
answered

Marked out of  
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question

For the signal  $x(t) = \text{rep}_{157} [ 106 \text{rect} ( ( t - 10.99 ) / 54.95 ) ]$ , the trigonometric Fourier series coefficient  $b_{-4}$  is:

Answer:

Previous page

Next page

Time left 0:12:53

Question 1

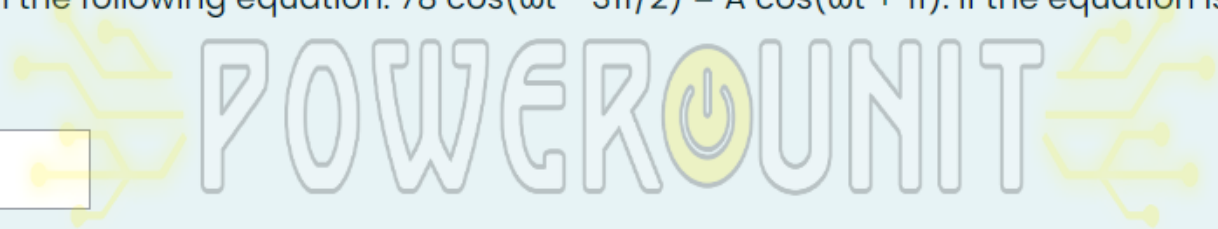
Not yet  
answered

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question

Determine A in the following equation:  $78 \cos(\omega t - 3\pi/2) = A \cos(\omega t + \pi)$ . If the equation is invalid, then answer 0.0 for A.

Answer:



Next page

Question **2**Not yet  
answeredMarked out of  
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The real part of the complex number  $A = \ln(2.58 - j7.74)$  is:

Answer:

[Previous page](#)[Next page](#)