

Home ► My courses ► EEE117-2019S-Sec1 ► Homework ►  
Homework 5 - Chapter 12

**Started on** Monday, 4 February 2019, 7:20 AM

**State** Finished

**Completed on** Wednesday, 20 February 2019, 8:02 PM

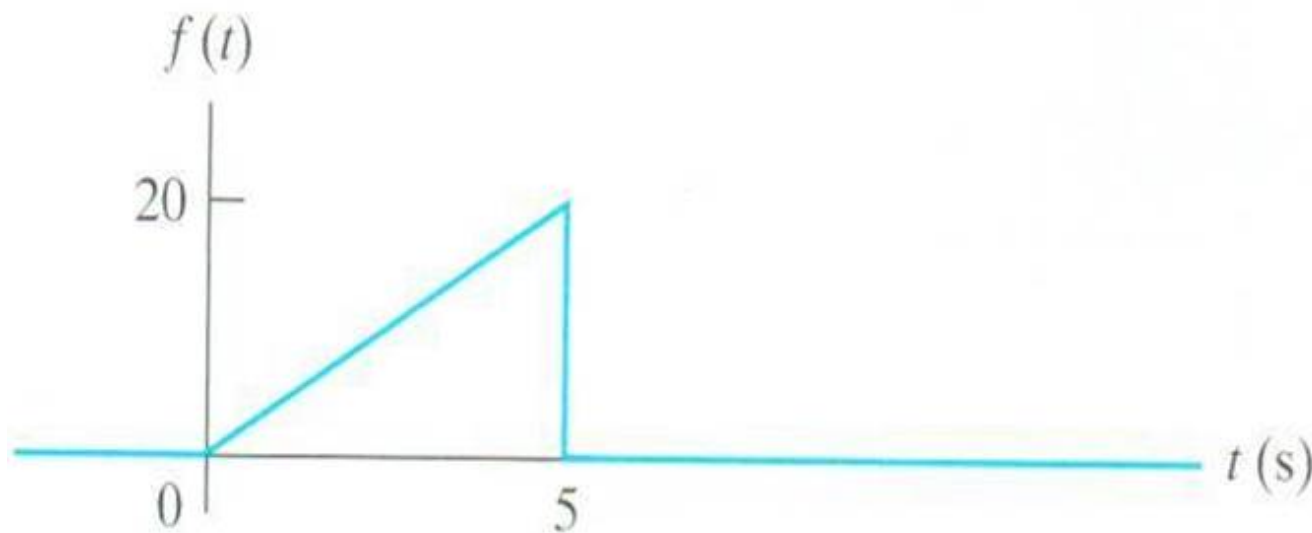
**Time taken** 16 days 12 hours

**Grade** 100.00 out of 100.00

### Question 1

Correct

Mark 20.00 out of 20.00



P12.01c\_7ed

Use step functions to write the expression for this waveform.

$$f(t) = 4t [u(t - \boxed{0} \checkmark) - u(t - \boxed{5} \checkmark)]$$

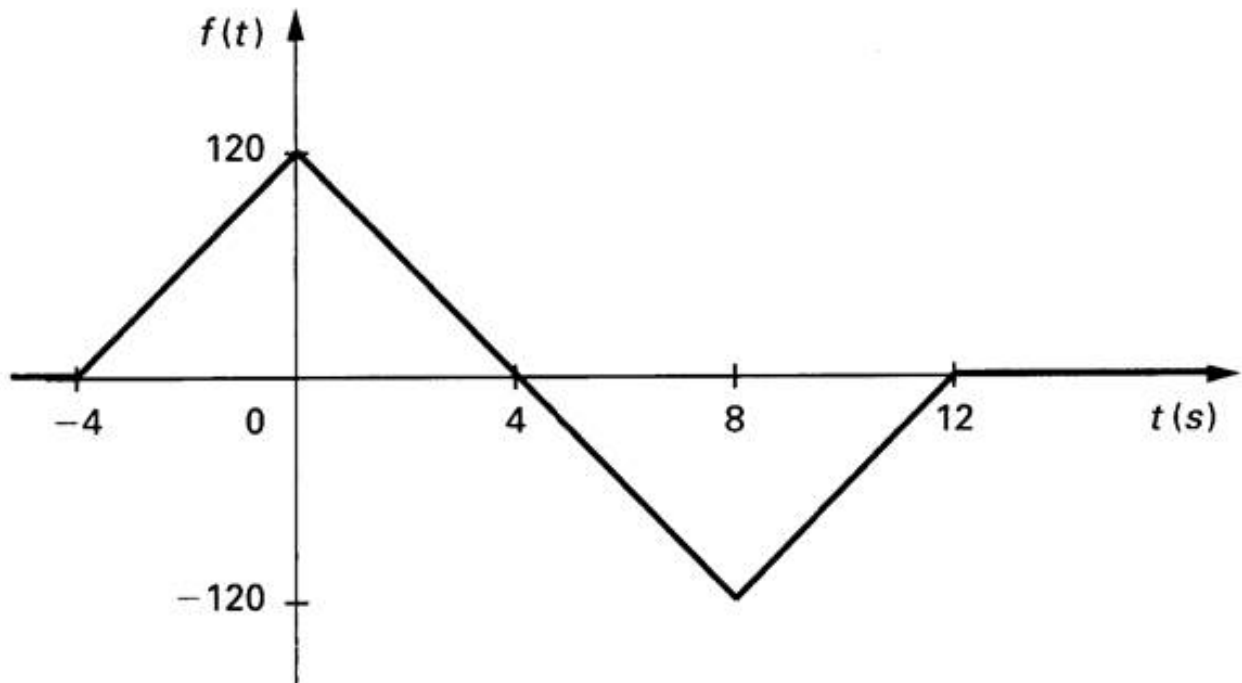
**Correct**

Marks for this submission: 20.00/20.00.

## Question 2

Correct

Mark 20.00 out of 20.00



P12.01b\_6ed

Use step functions to write the expression for this waveform.

a) Write the expression for the interval  $-4 \leq t \leq 0$  sec.

$$f(t) = (30t + 120)[u(t + 4) - u(t - 0)]$$

b) Write the expression for the interval  $0 \leq t \leq 8$  sec.

$$f(t) = (-30t + 120)[u(t - 0) - u(t - 8)]$$

c) Write the expression for the interval  $8 \leq t \leq 12$  sec.

$$f(t) = (30t - 360)[u(t - 8) - u(t - 12)]$$

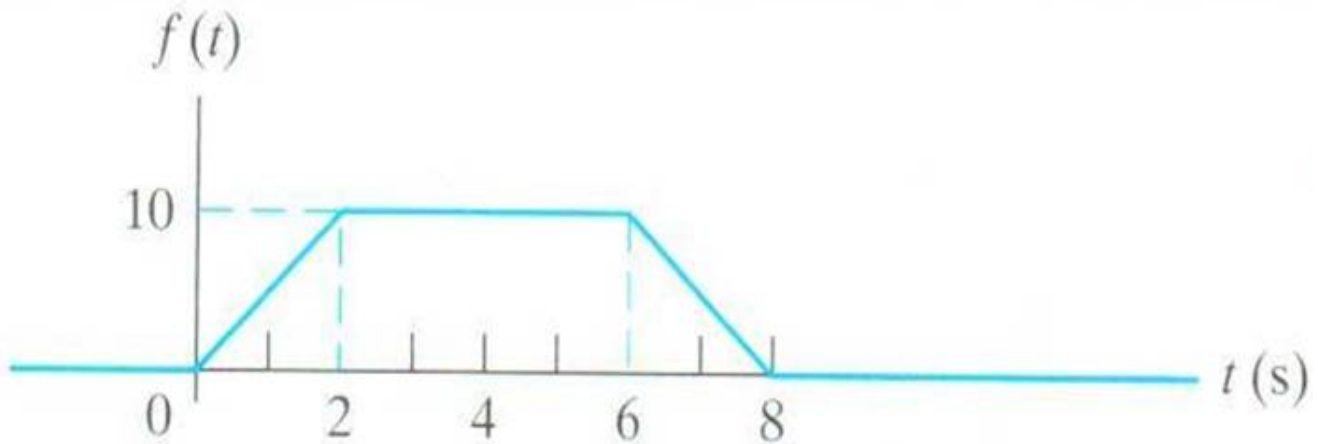
Correct

Marks for this submission: 20.00/20.00.

### Question 3

Correct

Mark 20.00 out of 20.00



P12.01a\_7ed

Use step functions to write the expression for this waveform.

a) Write the expression for the interval  $0 \leq t \leq 2$  sec.

$$f(t) = (5t)[u(t - \boxed{0} \checkmark) - u(t - \boxed{2} \checkmark)]$$

b) Write the expression for the interval  $2 \leq t \leq 6$  sec.

$$f(t) = (10)[u(t - \boxed{2} \checkmark) - u(t - \boxed{6} \checkmark)]$$

c) Write the expression for the interval  $6 \leq t \leq 8$  sec.

$$f(t) = (-5t + 40)[u(t - \boxed{6} \checkmark) - u(t - \boxed{8} \checkmark)]$$

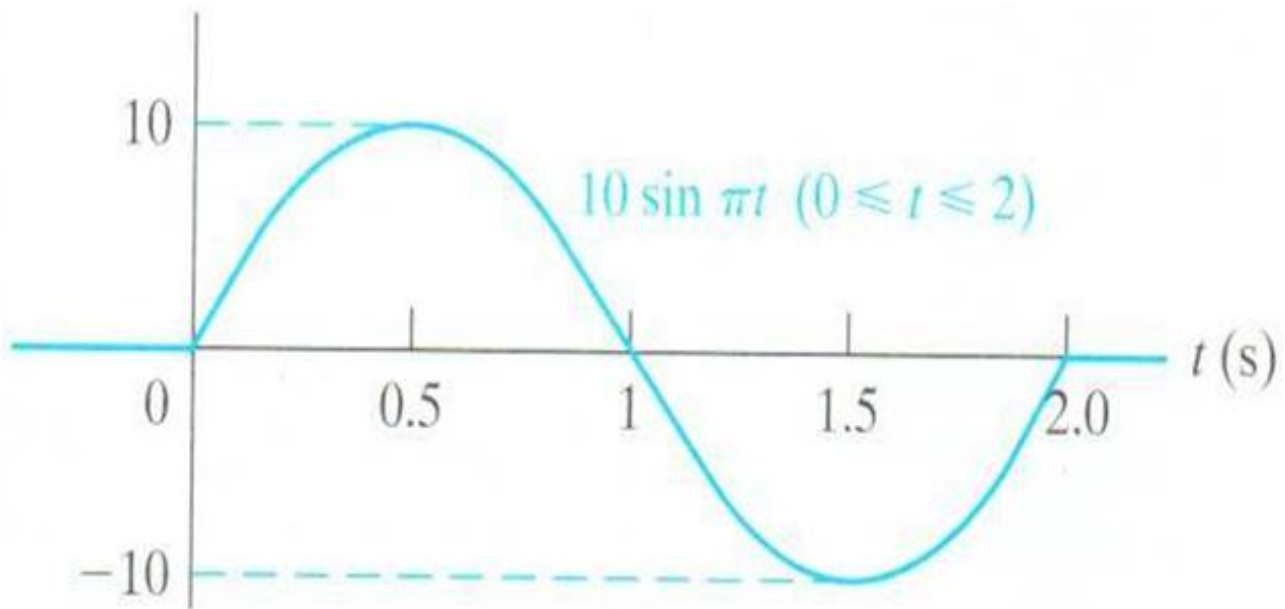
**Correct**

Marks for this submission: 20.00/20.00.

#### Question 4

Correct

Mark 20.00 out of 20.00



P12.01b\_7ed

Use step functions to write the expression for this waveform.

$$f(t) = 10 \sin (\pi t) [u(t - 0 \checkmark) - u(t - 2 \checkmark)]$$

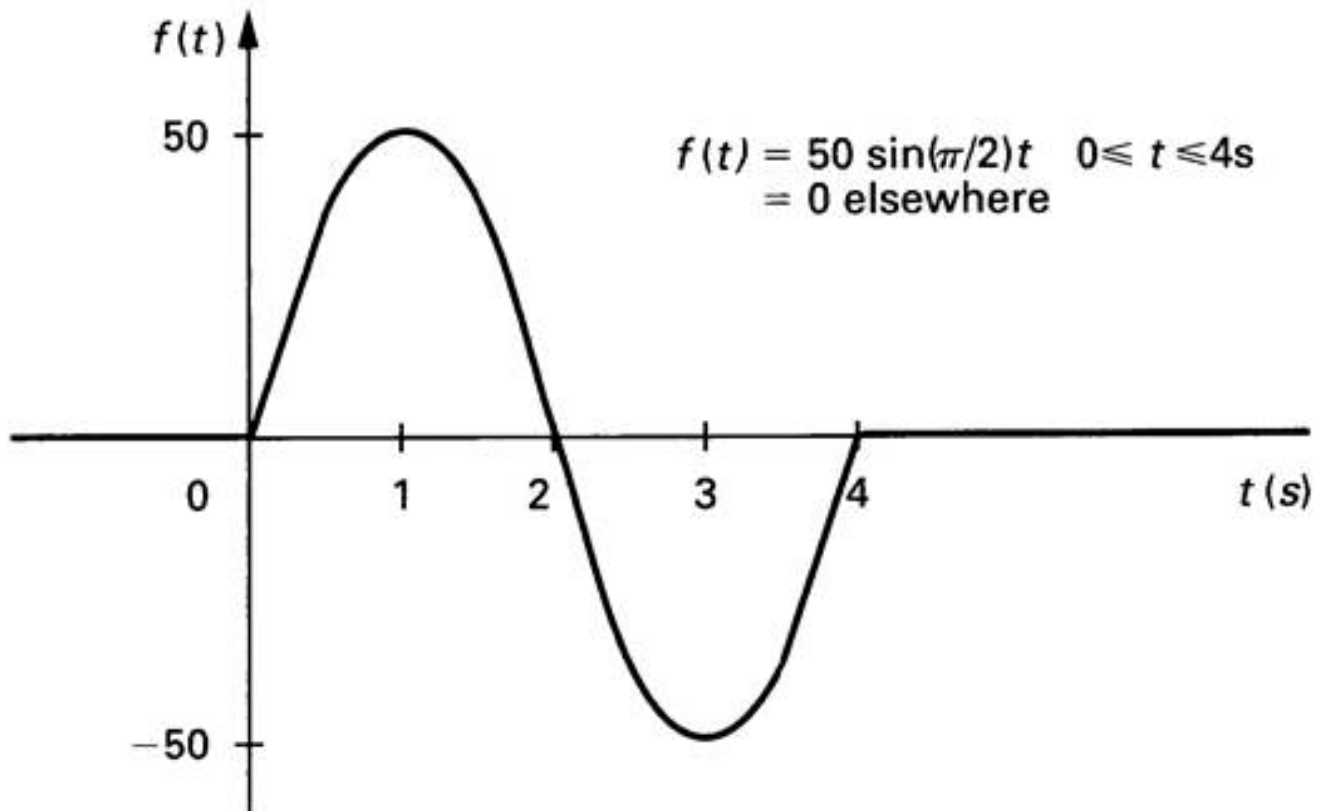
**Correct**

Marks for this submission: 20.00/20.00.

### Question 5

Correct

Mark 20.00 out of 20.00



P12.01a\_6ed

Use step functions to write the expression for this waveform.

$$f(t) = 50 \sin(\pi/2 t) [u(t - 0) - u(t - 4)]$$

Correct

Marks for this submission: 20.00/20.00.

◀ Homework 4 - Chapter 11

Jump to...



Homework 6 - Chapter 12 ▶

