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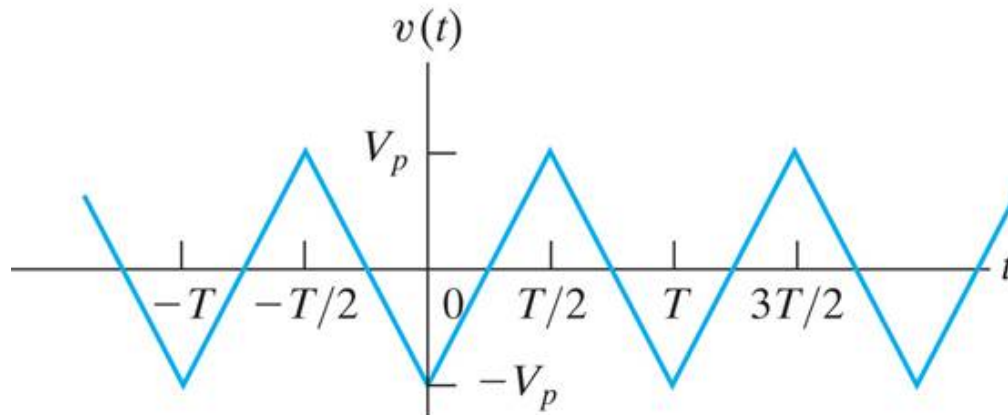
Time taken 38 mins 28 secs

Grade 100.00 out of 100.00

Question 1

Correct

Mark 100.00 out of 100.00



Quiz 11b

Given: The Fourier coefficients for this waveform are

$$a_n = -8V_p / (n\pi)^2 \text{ Volts for } n \text{ odd} \quad b_n = 0 \quad V_p = 50 \text{ V} \quad T = 5 \text{ ms (milli sec)}$$

Write the following terms of this waveform's Fourier series.

a) What is the average value a_v ?

$$a_v = 0 \text{ Volts}$$

Answer the next two questions in the order of magnitude, identify cosine or sine, and the frequency of the sinusoid in radians/sec.

b) Write the expression for $n = 1$.

$$v_1(t) = -40.53 \text{ Cosine } (1256.64 \text{ t) Volts}$$

c) Write the expression for $n = 5$.

$$v_5(t) = -1.62 \text{ Cosine } (6283.19 \text{ t) Volts}$$

Correct

Marks for this submission: 100.00/100.00.