

ECE 2210 Homework #19

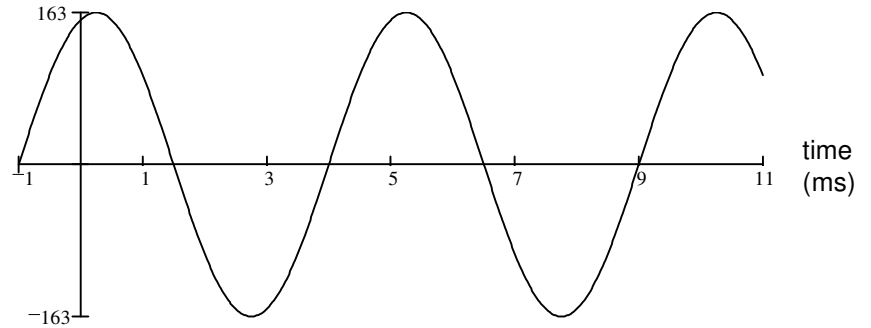
Due: Tue, 11/14/06

b

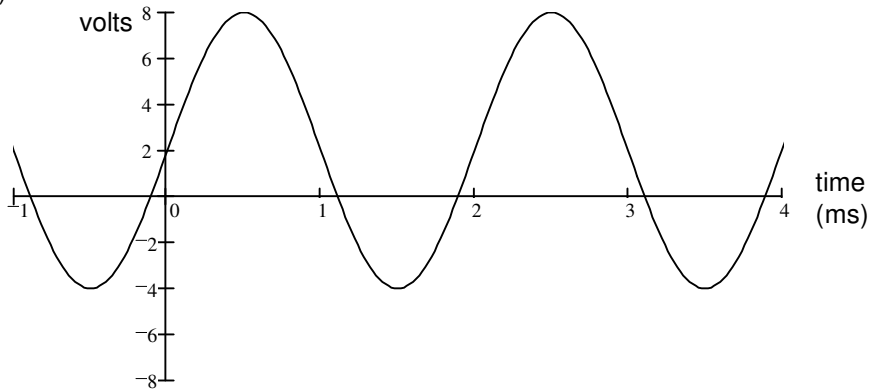
Read section 6.1, p 272 in your textbook.

1. For each of the following waveforms, find:
 - 1) Average DC (V_{DC} , or I_{DC}) value
 - 2) RMS (effective) value

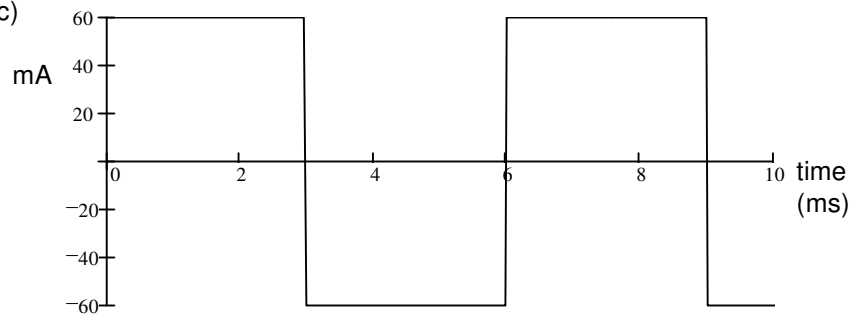
1a) volts



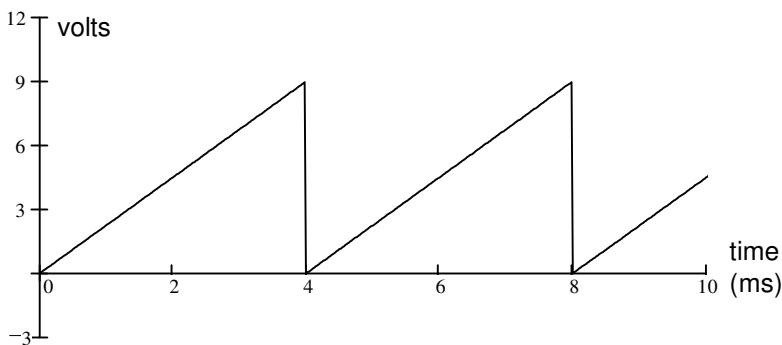
b)



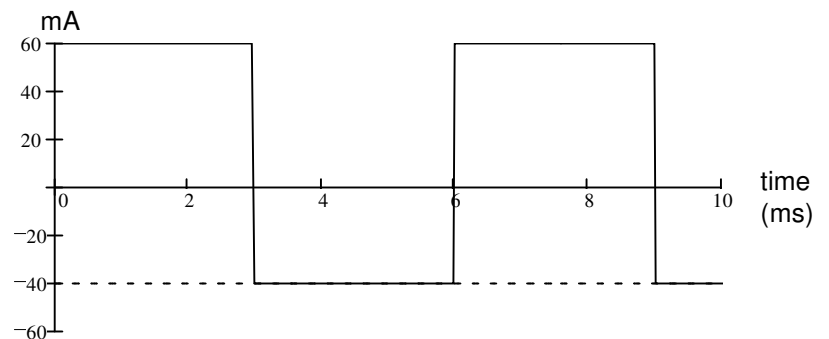
c)



d)



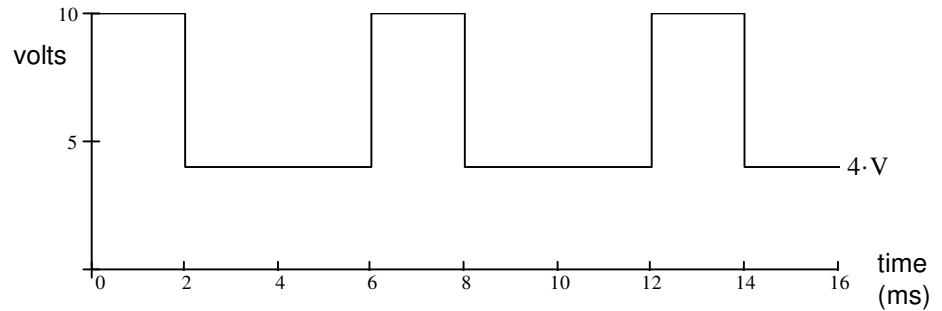
e)



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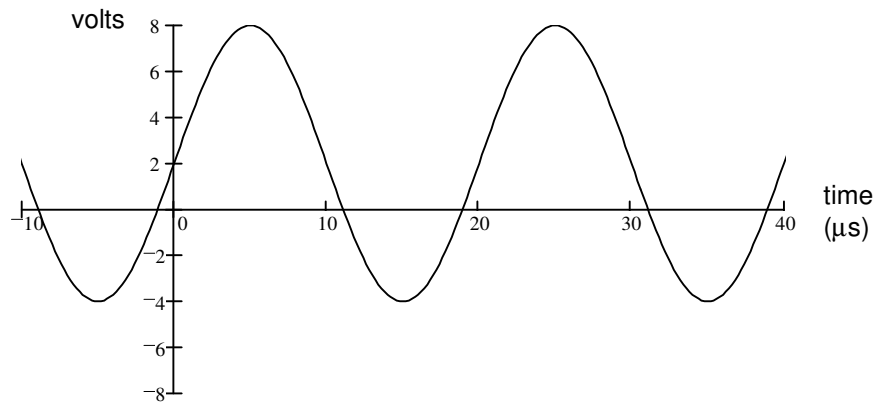
2. For waveform shown, find:

- Average DC (V_{DC}) value
- RMS (effective) value



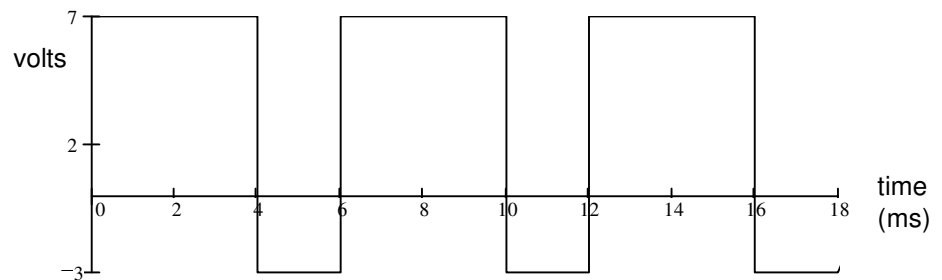
3. Find:

- The average, DC (V_{DC}) voltage.
- The RMS (effective) voltage



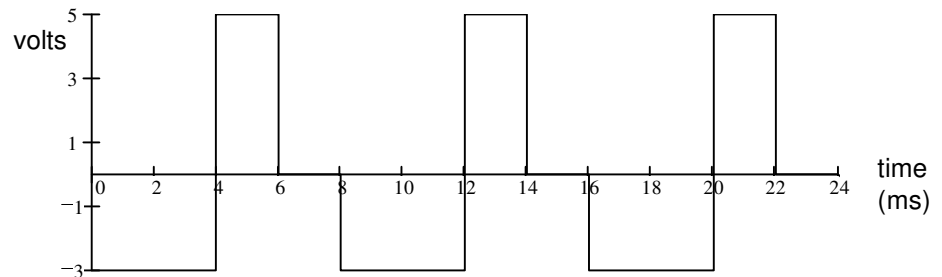
4. For waveform shown, find:

- Average DC (V_{DC}) value
- RMS (effective) value



5. For waveform shown, find:

- Average DC (V_{DC}) value
- RMS (effective) value



Answers

- | | | | |
|--------------|-----------|---------------|-----------|
| 1. a) 0·V | 115·V | b) 2·V | 4.69·V |
| c) 0·mA | 60·mA | d) 4.5·V | 5.2·V |
| e) 10·mA | 51·mA | | |
| 2. a) 6·V | b) 6.63·V | 3. a) 2·V | b) 4.69·V |
| 4. a) 3.67·V | b) 5.97·V | 5. a) -0.25·V | b) 3.28·V |