

Introduction to Digital Computing

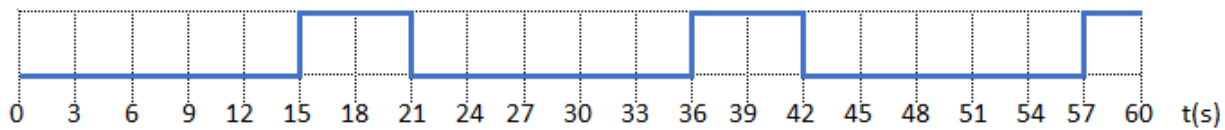
Homework 11 – Digital Clock

Question 1 to 3

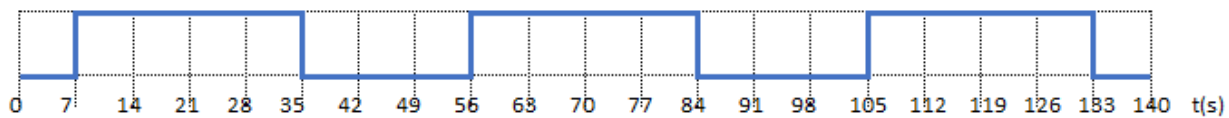
For the following pulse, find:

- a. Period
- b. Frequency
- c. Duty cycle

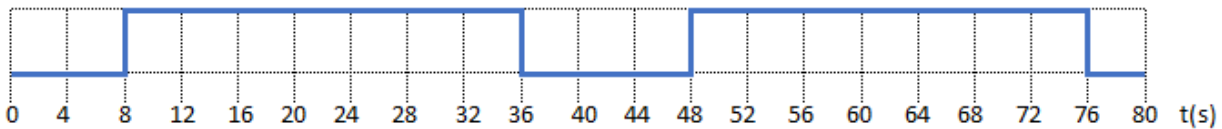
1)



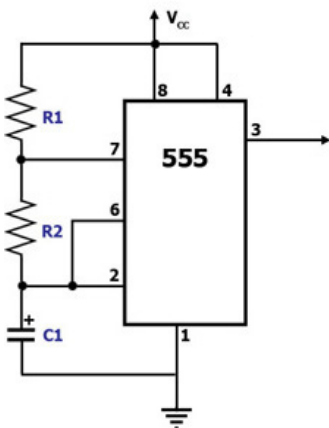
2)



3)



Question 4 to 6



For the following 555 timer, find:

- a. Period
- b. Frequency
- c. Duty cycle

Given:

4) $R1 = 300 \Omega$, $R2 = 150 \Omega$, and $C1 = 0.5 \text{ F}$

5) $R1 = 160 \Omega$, $R2 = 560 \Omega$, and $C1 = 0.01 \text{ F}$

6) $R1 = 460 \Omega$, $R2 = 320 \Omega$, and $C1 = 0.05 \text{ F}$