

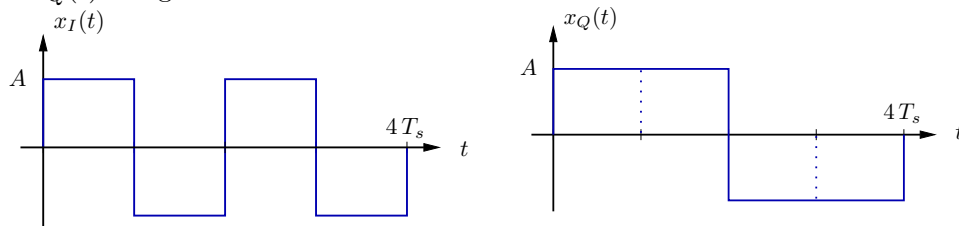
Exercise Lesson 9

Problems from the compendium:

3.1, 3.2, 3.3, Example 3.1 on page 121
3.5, 3.6, 3.7, 3.10b, 3.11c

Other problems:

9.1 Consider a QAM signal $x(t)$ for which the baseband quadrature components $x_I(t)$ and $x_Q(t)$ are given as below.



- (a) Draw the I-Q diagram of the signal $x(t)$, including the constellation points and the transitions for the different time intervals.
- (b) Suppose that the rectangular pulse is replaced by a triangular pulse of same duration and amplitude. Discuss how this change affects the I-Q diagram.