

QUIZ 2  
LEARNING IN REPRODUCING KERNEL HILBERT SPACES  
DATA 442/642

**Exercise 1** (10 points)

Read Section 11.11, (COMPUTATIONAL CONSIDERATIONS FOR SVM) page 576 from your book. Explain the importance of the Big- $\mathcal{O}$  notation and provide some examples of common Big- $\mathcal{O}$  complexities by looking at a complexity chart. What is the most desirable among the different complexities? Then briefly report the different computational considerations for SVM.