

Seminar 1

Probabilities

DEDP

1. Let A be a continuous r.v. with distribution $\mathcal{U} [0, \pi]$
 - a. Draw the PDF of A
 - b. Compute the probability that $A > 1$
 - c. Compute the probability that $A \in (0, 2)$
 - d. Draw the CDF function and write its mathematical expression
 - e. What is the distribution of $B = A - 2$?
2. Let A be a r.v. with distribution $\mathcal{N} (\mu = 1, \sigma^2 = 2)$.
 - a. Compute the probability that $A \in [2, 4]$
 - b. What is the distribution of $B = A - 2$?
 - c. What is the maximum value of $w_A(x)$ and for what x is it reached?