

**QUESTION FOR MATH 343 FOR THE LECTURE OF  
28 APRIL**

**Problem 1.** A box contains 1 blue marble and 9 red marbles. A marble is chosen at random. Record 0 if it is red and 1 if it is blue.

- (1) Is  $Z$  a Bernoulli random variable?
- (2) Find  $E(Z)$ .
- (3) Find the standard deviation  $\sigma_Z$ .