

1. (1 pt.) If  $Z = -1$ , then  $A(Z) =$
2. (1 pt.) If  $A(Z) = 0.0122$ , then  $Z =$
3. If  $Z$  is the random variable for the standard normal distribution, then
  - a. (1 pt.)  $\Pr(Z \leq -1) =$
  - b. (1 pt.)  $\Pr(Z \geq 1) =$
  - c. (1 pt.)  $\Pr(-2 \leq Z \leq 1) =$
4. (1 pt.) The 60th percentile of the standard normal distribution is
5. (1 pt.) For the standard normal distribution,  $\frac{3}{4}$  is at what percentile?
6. If  $X$  is a random variable having a normal distribution with mean  $\mu = 50$  and standard deviation  $\sigma = 10$ , then
  - a. (1 pt.)  $\Pr(X \leq 70) =$
  - b. (1 pt.)  $\Pr(X \geq 50) =$
  - c. (1 pt.)  $\Pr(50 \leq X \leq 70) =$