

1. Stephen Curry is one of the best shooter in the NBA. Suppose that the number of points that Curry scores per game follows a normal distribution with a mean of 24.2 points and a standard deviation of 2 points. Let  $X$  denote the number of points that Curry scores in a game.
  - (a) (3 points) Write the distribution of  $X$ .
  - (b) (3 points) Find the probability that Curry scores more than 26 points in a game.
  - (c) (3 points) Find the probability that Curry scores less than 24 points in a game.
  - (d) (3 points) Find the probability that Curry scores 25 points in a game.
2. Tom Brady is one of the best Quarter Back in the NFL history. Suppose that the number of touch-downs passes that Brady scores per game follows a normal distribution with a mean of 2.7 passes and a standard deviation of 1 pass. Let  $X$  denote the number of touch-down passes that Brady scores in a game.
  - (a) (3 points) Write the distribution of  $X$ .
  - (b) (3 points) Find the probability that Brady scores more than 3 touch-down passes in a game.
  - (c) (3 points) Find the probability that Brady scores less than 2 touch-down passes in a game.