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.

   $$X \sim N(24.2, 2)$$

   (b) (3 points) Find the probability that Curry scores more than 26 points in a game.

   $$P(X > 26) = 0.184$$

   (c) (3 points) Find the probability that Curry scores less than 24 points in a game.

   $$P(X < 24) = 0.46$$

   (d) (3 points) Find the probability that Curry scores 25 points in a game.

   $$P(X = 25) = 0$$

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.

   $$X \sim N(2.7, 1)$$

   (b) (3 points) Find the probability that Brady scores more than 3 touch-down passes in a game.

   $$P(X > 3) = 0.382$$

   (c) (3 points) Find the probability that Brady scores less than 2 touch-down passes in a game.

   $$P(X < 2) = 0.242$$