sample Quiz #3

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Question 1–3
The following table contains the probability distribution for X = the number of weekly sales of a particular photocopying machine.

X	0	1	2	3	4
$P(X)$	0.05	0.1	0.15	0.2	0.5

1) Referring to the table, the probability of at most two machine being sold is _____.

    A) 0.70   B) 0.15   C) 0.30   D) 0.20

2) Referring to the table, the mean or expected value for the number of sales for a given week is _____.

    A) 3.0   B) 1.0   C) 2.0   D) 1.5

3) Referring to the table, the standard deviation of the number of sales is _____.

    A) 1.00   B) 1.23   C) 1.50   D) 3.0

4) The possible responses to the question "How long have you been living at your current residence?" are values from a _____ random variable.

    A) continuous   B) discrete

Questions 5–7
A survey indicates that for each trip to the supermarket, a shopper sends an average of 45 minutes with a standard deviation of 10 minutes. The length of time spent in the store is normally distributed.

5) Find the probability that a shopper will be in the store bewteen 24 and 54 minutes.

    A) 0.9000   B) 0.7980   C) 0.8159   D) –1.200

6) Find the probability that a shopper will be in the store less than 34.5 minutes

    A) –1.050   B) 0.3085   C) 0.6915   D) 0.1469

7) 69.15% of the shoppers will be in the store for more than how many minutes ? (hint: find X for the right–tail probability)

    A) 40.0 minutes   B) 51.9 minutes   C) 50.0 minutes   D) 38.1 minutes

Questions 8–9:
From past records, a clothing store finds that 25% of the people who enter the store will make a purchase. During a one–hour period, 5 people enter the store.

8) The probability that at least two people will make a purchase is _____.

    A) 0.2637   B) 0.7627   C) 0.3672   D) 0.5786

9) The average number of people you should expect to make a purchase is _____.

    A) 1.50   B) 1.25   C) 0.25   D) 1.00

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) C
2) A
3) B
4) A
5) B
6) D
7) A
8) C
9) B