I. FOR THE FOLLOWING DATA: $1, \quad -7, \quad -5, \quad 10, \quad 0$
COMPUTE THE FOLLOWING

1. THE MEAN_____ 2. THE MEDIAN_____

3. THE RANGE _____ 4. THE VARIANCE _____

5. THE STANDARD DEVIATION _____

II. FOR THE GIVEN PROBABILITY DISTRIBUTION, FIND THE FOLLOWING:

X	-6	-4	3	5
$P(X)$	.35	.2	y	.15

6. FIND THE MISSING PROBABLILITY VALUE, y. _____

7. THE EXPECTED VALUE, μ _____

8. THE STANDARD DEVIATION, σ _____

III. USE THE BINOMIAL TABLE.

9. GIVEN: $n=7, \quad p=.30$ FIND $P(X=5)$_____

10. GIVEN: $n=15, \quad p=.65$ FIND $P(X>11)$ _____

11. GIVEN: $n=14, \quad p=.75$ FIND $P(X<12)$ _____

12. GIVEN: $n=8, \quad p=.2$ FIND $P(X \textit{ is at least } 1)$ _____

13. GIVEN: $n=19, \quad p=.85$ FIND $P(X \textit{ is less than } 16)$ _____

14. GIVEN: $n=13, \quad p=.55$ FIND $P(4 \le X < 8)$ _____

IIII. ASSUME THAT 90% OF ALL STATISTICS INSTRUCTORS ARE CONSIDERED STRIKINGLY HANDSOME AND ENDEARINGLY CHARMING. (I REALIZE THE ACTUAL PERCENTAGE IS HIGHER THAN THAT, BUT WORK WITH ME ON THIS.) SUPPOSE WE TAKE A RANDOM SAMPLE OF 15 STATISTICS INSTRUCTORS. FIND THE PROBABILITY THAT THE NUMBER THAT ARE STRIKINGLY HANDSOME AND ENDEARINGLY CHARMING WILL BE:

15. EXACTLY 15 _____

16. LESS THAN 12 _____

17. AT MOST 10 _____

18. BETWEEN 10 AND 14 (INCLUDE BOTH ENDPOINTS) _____

19. WHAT IS THE EXPECTED VALUE? _____

20. WHAT IS THE STANDARD DEVIATION? _____

V. SUPPOSE THAT FORTY PERCENT OF MARRIED COUPLES AGREE WITH A CERTAIN METHOD OF CHILD DISCIPLINE. OUT OF 18 COUPLES SURVEYED, WHAT IS THE PROBABILITY THAT FEWER THAN HALF OF THEM AGREE WITH THE METHOD?

VI. SUPPOSE NEW TELEVISION PROGRAMS HAVE A 20% CHANCE OF BEING RENEWED FOR THE SECOND SEASON. IF A NETWORK INTRODUCES 12 NEW SHOWS, FND THE PROBABILITY THAT:

22. THE NUMBER RENEWED IS FEWER THAN HALF

23. THE NUMBER RENEWED IS MORE THAN TWO.

24. THE NUMBER RENEWED IS BETWEEN 3 AND 6 (INCLUDE THE ENDPOINTS.)

25. AT LEAST ONE SHOW IS RENEWED.