I. FOR THE FOLLOWING DATA: 7, -2, -6, 10, 1, 13
COMPUTE THE FOLLOWING

1. THE MEAN 2. THE MEDIAN 3. THE RANGE

4. THE VARIANCE 5. THE STANDARD DEVIATION

II. THE EXPERIMENT IS TO ROLL A 4-SIDED DIE, THEN A 5-SIDED DIE.
THE SAMPLE SPACE IS: THE EVENTS ARE:

1,1 1,2 1,3 1,4 1,5 A={SUM IS 5 OR LESS}

2,1 2,2 2,3 2,4 2,5 B={1^{ST} # IS 3}

3,1 3,2 3,3 3,4 3,5 C={2^{ND} # IS 4}

4,1 4,2 4,3 4,4 4,5 D={DOUBLES}

6. FIND THE PROBABILITY OF EACH EVENT

(i) P(A) = (ii) P(B) = (iii) P(C) = (iiii) P(D) =

(v) P(A 'or' C)= (vi) P(C 'and' B)= (vii) P(B 'or' D)=

7. DETERMINE WHETHER THE EVENTS A & B ARE INDEPENDENT.

8. DETERMINE WHETHER THE EVENTS C & D ARE INDEPENDENT.

III. GIVEN:

	A	B	C	TOTAL
Y	.12	.3	.18	.6
Z	.08	.0	.32	.4
TOTAL	.2	.3	.5	1.0

FIND EACH OF THE FOLLOWING:

9. P(Z)= 10. P(A 'and' Z)= 11. P(B 'or' Z)'=

12. ARE EVENTS C & Y INDEPENDENT? VERIFY YOUR RESULT.

13. ARE EVENTS A & Z INDEPENDENT? VERIFY YOUR RESULT.

III. GIVEN: ASSUME EVENTS A & Y **ARE** INDEPENDENT.

	A	B	C	D	TOTAL
Y			.15	.17	.4
Z				.03	
TOTAL		.3	.3		1

FIND EACH OF THE FOLLOWING:

14. P(Z)= 15. P(A 'and' Z)= 16. P(B 'and' Z)=

17. P(D)= 18. P(C 'or' Z)=

19. P(B 'or' Y)=

20. ARE EVENTS C & Z INDEPENDENT? VERIFY YOUR RESULT.

NOTE THAT THERE WILL ALSO BE A SECTION OF MULTIPLE CHOICE ITEMS AND YOU **MIGHT** BE ASKED TO STATE EITHER CHEBYCHEV'S THEOREM OR THE EMPIRICAL RULE.

ALSO REMEMBER THAT YOU **MAY** USE A CALCULATOR ON THE EXAM, SO BRING A COUPLE. DO NOT EXPECT THE EXAM PROCTOR TO BE ABLE TO TELL YOU HOW TO USE YOUR CALCULATOR. **BRING ONE THAT YOU KNOW HOW TO OPERATE!**

BRING SEVERAL THINGS TO WRITE WITH.

I HOPE TO HAVE THE SOLUTIONS AVAILABLE BEFORE THE WEEKEND, BUT MIGHT NOT.