Exam 1: Answer Key

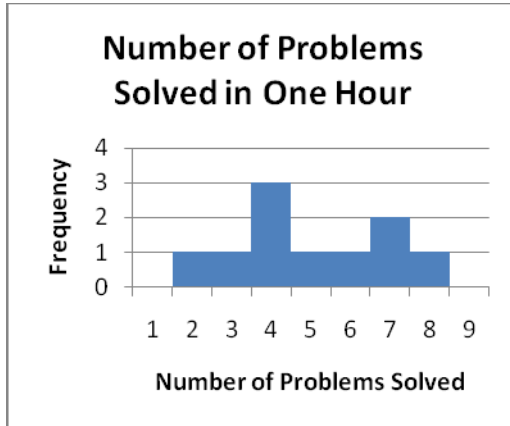| FORM A (White): Multiple Choice	FORM B (Yellow): Multiple Choice
1. C	1. E
2. A	2. C
3. D	3. C
4. D	4. D
5. A	5. A
6. E	6. C
7. C	7. A
8. C	8. D
9. D	9. D
10. A	10. A
11. B	11. A
12. D	12. B
13. C	13. C
14. B	14. C
15. D	15. B
16. A	16. B
17. B	17. D
18. C	18. C
19. C	19. B
20. B	20. D
21. A	21. B
22. D	22. D
23. D	23. B
24. B	24. B
25. A	25. C
26. B	26. A
27. D	27. D
28. B	28. D
29. B	29. B
30. C	30. A

Section 2- Statistics (Same answers for Form A and Form B)

A.) Histogram:

Number of Problems Solved in One Hour

NOTE REGARDING HISTOGRAM: If your histogram does not show the value "1" or value "9" along the x-axis, that's OK. If your histogram's x-axis starts with a zero, that's OK. If your histogram doesn't have a title, that's OK, as long as your x-axis clearly indicates that the variable being plotted is the number of problems solved.

B.) Mode = 4

C.) Median = 4.5

D.) Mean = (4+6+8+4+4+7+3+7+5+2)/10 = (50/10) = 5.0

E.) Range = 2 through 8; or 6

F.) Variance = 3.40

	Problems Solved	(X-M)	(X-M)^2
	4	-1	1
	6	1	1
	8	3	9
	4	-1	1
	4	-1	1
	7	2	4
	3	-2	4
	7	2	4
	5	0	0
	2	-3	9
SUM	50	0	34

G.) Standard Deviation = ($\sqrt{3.40}$) or 1.84
(You only needed to put the value for the variance inside the square root sign; you did not need to actually calculate the square root.

NOTES REGARDING CALCULATIONS OF MEAN AND VARIANCE: SEE NEXT PAGE

- If you made an arithmetic error in calculating the mean, but your work shows that you know the concept of how to calculate a mean, you will receive 1 out of the 2 points.
- If your mean is correct but you made an arithmetic error in calculating the variance, and your work shows that you know the concept of how to calculate the variance, you will receive 1 out of the 2 points.
- If you calculated the mean incorrectly, but your variance and standard deviation calculations are done properly *given that* you had the wrong mean, you will not lose additional points.