## FLORIDA HIGH SCHOOLS COMPUTING COMPETITION '82 JUDGING CRITERIA

- 1.1 RUN PROGRAM: OUTPUT: I AM THINKING OF A NUMBER. WHAT NUMBER IS IT? INPUT: 50 OUTPUT: TOO HIGH then INPUT: 25 or if OUTPUT: TOO LOW then INPUT: 75 (Continue to guess in this manner, until you get the #) (dividing amount by 2 each time) - Rerun program if you don't guess right in 7 tries.
- 1.2 RUN PROGRAM: OUTPUT: 2,5,8,10,13,17,18,20,25,26,29,32,34,37,40,41,45
- 1.3 RUN PROGRAM: OUTPUT: 35392

1.4 RUN PROGRAM: OUTPUT: (2 random clock times and the sum of the 2 times. Example below): 5 : 33 8 : 44 -----2 : 17 (run program twice)

- **1.5** INPUT: Enter a, b, c: 2, 2, 2
   OUTPUT: COMPLEX

   INPUT: Enter a, b, c: 1, -1, -6
   OUTPUT: -2, 3
- 1.6 INPUT: Enter number: 42 OUTPUT: 2 3 7
- **1.7** INPUT: Enter P,i,N,Y: **100,.01,4,100** OUTPUT: **\$271.49**
- **1.8** RUN PROGRAM: OUTPUT: **7 11 25**
- 1.9 INPUT: Enter a symbol: \*
   OUTPUT: (\* is displayed for 45 seconds, then it is cleared)

1.10 INPUT: Enter decimal: .35 OUTPUT: 7/20

**1.11** RUN PROGRAM: (An asterisk will appear in the center of the screen. Press a U to move it up, D down, R right, L to the left. It must not leave a sketched path.)

2.1 INPUT: Enter month, day: 12, 31 OUTPUT: FRIDAY INPUT: Enter month, day: 5, 29 OUTPUT: SATURDAY **2.2** INPUT: INPUT: Enter n: 6 Enter n: 3 Enter vertex (X, Y): 5, 1Enter vertex (X, Y): 1, 1Enter vertex (X, Y): 2, 4 Enter vertex (X, Y): 5, 5Enter vertex (X, Y): -3, 3 Enter vertex (X, Y): -1, -4 Enter vertex (X, Y): -3, -2 Enter vertex (X, Y): -1, -4 OUTPUT: AREA = 6 Enter vertex (X, Y): 2, -2 OUTPUT: AREA = 41.5 2.3 RUN PROGRAM: OUTPUT: 21978 2.4 RUN PROGRAM: OUTPUT: 370 371 407 2.5 INPUT: Enter name: DOUG WOOLLEY OUTPUT: (the following will zigzag from one side of the screen to the other and back again) D 0 U G W 0 0 ь  $\mathbf{L}$ Е Y 2.6 RUN PROGRAM: OUTPUT: (A stick figure is repeatedly drawn. It will also wave its arm.) 2.7 INPUT: How many letters: 4 OUTPUT: (random permutations of Enter letter: **T** the 4 letters. Stop Enter letter: **S** program when you see Enter letter: I **LIST** as one of them.) Enter letter: L

2.8 RUN PROGRAM: OUTPUT: (Four random letters, numbers, or symbols) INPUT: (Type all four random characters correctly) OUTPUT: (The time elapsed must be printed) RUN PROGRAM: OUTPUT: (Four random letters, numbers, or symbols). INPUT: (Type 2 of the characters incorrectly) OUTPUT: (The 2 characters that were typed incorrectly must be displayed. No time is displayed.) 2.9 INPUT: Enter price \$: 11.36 Enter denomination \$: 20 OUTPUT: 1 \$5 2 DOLLARS 2 OUARTERS 1 DIME 4 PENNIES 2.10 INPUT: (Choose option to convert inches to centimeters) Enter inches: 100 OUTPUT: 254 CM INPUT: (Choose option to convert miles to kilometers) Enter miles: 6.2138 OUTPUT: 10 KM 2.11 RUN PROGRAM: OUTPUT: A=2 B=5 C=9 D=2 2.12 INPUT: Enter Month1, Day1: 4, 8 Enter Month2, Day2: 10, 16 OUTPUT: 191 DAYS 2.13 INPUT: Enter month, day, year: 10, 16, 66 Enter amount \$: 52.13 Enter payee: DOUG WOOLLEY OUTPUT: \* OCT. 16, 1966 \* \* \* \* PAY TO THE \* ORDER OF DOUG WOOLLEY \* \$52.13 \* \* \* \* \* FIFTY-TWO AND 13/100 DOLLARS 

3.1 INPUT: Enter 4 colors from the following six: (red, white, blue, green, yellow, black) OUTPUT: The number of colors that are correctly positioned will be indicated by BLACK pegs. The number of colors that are chosen correctly but are not positioned correctly will be indicated by WHITE pegs. INPUT: Enter another 4 colors according to the rules. Ten attempts are given to guess the computer's 4 colors. 3.2 INPUT: Enter end point of x-axis: 30, 34 Enter end point of y-axis: 20, 50 Enter increment: 2 How many points: 2 Enter point: 24, 40 Enter point: 26, 44 OUTPUT: INTERSECTION AT (20,34) \*\*\*\*\*\*\* \* \* + \* + \* \* 3.3 INPUT: Enter size: 3 OUTPUT: 6 1 8 7 5 3 2 9 4 MAGIC NUMBER = 15(NOTE: Magic number is sum of any row, column, or diagonal, and this number may vary from one team's program to another) INPUT: Enter size: 4 OUTPUT: 1 15 14 4 12 6 7 9 8 10 11 5 13 3 2 16

MAGIC NUMBER = 34

3.4 INPUT: Enter Roman Numeral: IV
Enter Roman Numeral: CDXCVI
OUTPUT: IV + CDXCVI = D
4 + 496 = 500
IV \* CDXCVI = MCMLXXXIV
4 \* 496 = 1984

3.5 RUN PROGRAM: OUTPUT: 2025 3025 9801

**3.6** Since the rules are not given with this problem, it is very difficult to judge the program.

**3.7** INPUT: Enter #: **1** Enter #: 3 Enter #: 5 Enter #: 7 Enter #: 9 Enter #: 11 Enter #: 13 Enter **#: 15** Enter **#: 2** Enter #: **4** Enter #: 6 Enter #: 8 Enter #: 10 Enter #: **12** Enter #: **14** Enter #: **16** Enter another number: 2

OUTPUT: BETWEEN 15 AND 4

**3.8** BONUS- Choose **FLORIDA** The computer asks yes or no questions concerning your choice. Count the number of questions it asked before it guessed FLORIDA.

3 points if guessed in 6 or less questions 2 points if guessed in 7-9 questions 1 point if guessed in 10-12 questions