



UNIVERSITY INTERSCHOLASTIC LEAGUE

Computer Applications Study Packet 2020

This Computer Applications packet contains tests and keys from **only** 2020 Invitational A, B and District. Region and State are not available.

This item is intended for High School grade levels.

2020 UIL Computer Applications Invitational Test A - Tiebreaker

General tiebreaker test instructions: The tiebreaker is a five-minute timed typing test to be completed using Calibri 12-point font in Word. At the end of that time, the contestants will be instructed to send their output to their printers. Scores will be calculated based on gross words per minute typed less one point per word, space, punctuation mark, or capitalization error plus bonus points for following directions or for correct format for a given type of document.

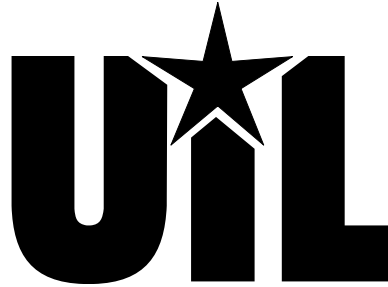
- I. **COPY** a document in Calibri 12-point type and print.
 - A. Enter the document on the next page in a business report format.
 1. Use standard margins.
 2. Center the following title in boldface type using all caps: **BORNEO**
 - B. Save document as **TB-InvA**.
 - C. Write your contestant number and **TB-InvA** in the upper right-hand corner of your printout.
- II. **STOP** when time is called and print your document when instructed to do so.

Borneo is the third-largest island in the world and the largest in Asia. It is located at 01°N 114°E in the Greater Sunda Islands Archipelago. At the geographic center of Maritime Southeast Asia, it is situated north of Java, east of Sumatra and west of Sulawesi.

Borneo is home to one of the oldest rainforests in the world, estimated at about 140 million years old. It is the center of the evolution and dispersal of many endemic species of plants and animals, and the rainforest is one of the few residual natural habitats for the endangered Bornean orangutan. It is a significant refuge for many endemic forest species, including the Borneo elephant, the eastern Sumatran rhinoceros, the Bornean clouded leopard, the Hose's palm civet and the Dayak fruit bat.

The island used to have extensive rainforest cover, but the coverage has been reduced due to substantial logging by the Indonesian and Malaysian wood industry. Half of the annual global tropical timber acquisition comes from Borneo. Palm oil plantations have been widely developed and are rapidly encroaching on the last remnants of primary rainforest. The practice of starting forest fires, beginning in 1997 by the locals to clear the forests for plantations, were intensified by an extraordinarily dry El Niño season, worsening the annual shrinkage of the rainforest. During these fires, hotspots were visible on satellite images and the resulting haze frequently affected Brunei, Indonesia and Malaysia.

UNIVERSITY INTERSCHOLASTIC LEAGUE



Computer Applications

INVITATIONAL A

2020

***DO NOT OPEN YOUR TEST UNTIL YOU ARE TOLD TO BEGIN.
DO NOT LEAVE THE ROOM UNTIL TIME IS CALLED.***

2020 UIL Computer Applications Invitational Test A

General test instructions: Follow instructions to create printouts for this contest. When time is called, printouts will be graded. Calibri 12-point font must be used for Excel and Word documents.

I. SPREADSHEET

MAXIMUM POINTS 125

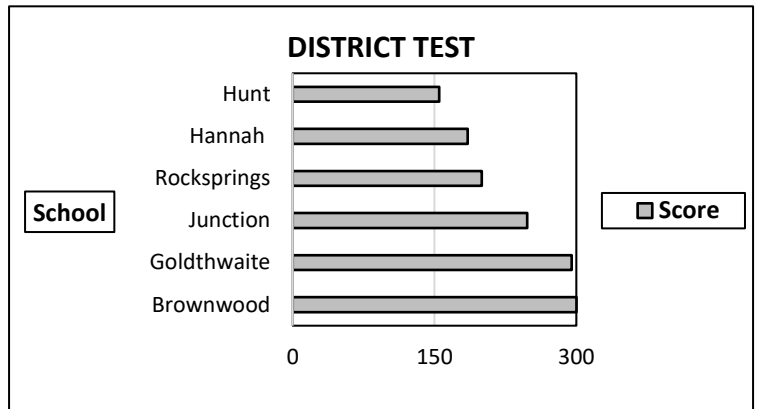
- A. Enter the data at the right in an Excel worksheet using Calibri 12-point font.
- B. In Cell C10, use the INT function with the parameter being an AVERAGE function to calculate the average of Cells C3 thru C8.
- C. In Cell C11, use an INT function with the parameter being a MEDIAN function to calculate the median of Cells C3 thru C8.
- D. In Cell C12, use an INT function with the parameter being a MAX function to calculate the maximum value in Cells C3 thru C8 as the parameter.
- E. In Cell C13, use an INT function with the parameter being a MIN function to calculate the minimum value in Cells C3 thru C8 as the parameter.
- F. Sort Rows 3 thru 8 in descending order on the **Score** values.
- G. In Cell D3, use the following calculation to build a student ID.
1. Use the LEFT function with the following parameters.
 - a. The text parameter is A3.
 - b. The number of characters parameter is 2.
 2. Add a concatenation operator (&) after the LEFT function.
 3. Add another LEFT function following the concatenation operator with the following parameters.
 - a. The text parameter is B3.
 - b. The number of characters parameter is 3.
- H. Replicate the formula in Cell D3 into Cells D4 thru D8.
- I. Create a one-page printout in portrait orientation with the following specifications:
1. Use 1" top, bottom, left and right margins.
 2. Center the printout horizontally and vertically.
 3. Use the following header 1" from the top of the page, and 1" from the right edge of the page, replacing 99999 with your contestant number: (99999)-InvA-1
 4. Show row and column indicators, but do not show gridlines.
 5. Show inside and outside borders on all cells with thin, black lines.
 6. Show a solid, heavy black border below Row 2.
 7. Show title in all caps merged and centered in Cells A1 thru D1 as shown in sample above.
 8. Set the print area to be Cells A1 thru D13 and show all values as numbers with no decimals.
 9. Format everything in Rows 1 and 2 and in Rows 10 thru 13 in boldface type.
 10. Center the contents of all cells and ensure nothing is truncated or wrapped.
 11. Save your spreadsheet as a file named **InvA-1** and print on one page.

	A	B	C	D
1	ANALYSIS OF SCORES			
2	Student	School	Score	ID
3	Dewey Hafta	Rocksprings	200	
4	Harley Werken	Hannah	185	
5	Will Wynn	Hunt	155	
6	Trina Woods	Junction	248	
7	Jacob Slatter	Goldthwaite	295	
8	Jim Sox	Brownwood	300	
9				
10		Average		
11		Median		
12		Maximum		
13		Minimum		

II. SPREADSHEET CHART

A. Using the worksheet from Part I, select Cells B2 thru C8 and create a 2D clustered bar chart with the following specifications.

1. Use the following title centered above chart in boldface type in all caps: **DISTRICT TEST**
2. Use a grey fill for the bars with a black border.
3. Use the following for the primary vertical title with a black border in bold type in upper/lowercase and shown horizontally: **School**
4. Change the horizontal axis scale to show a minimum of 0.0, a maximum of 300.0 and an interval of 150.0.
5. Show a legend with a black border to the right of the plot area with text in bold type.
6. Show a black border around the plot area and chart.
7. Copy the chart to be pasted into the document in **Part III**.
8. Print the chart if you are running out of time to receive some credit for your work.
9. Save your spreadsheet as **InvA-Ss**.



III. DOCUMENT WITH CHART

MAXIMUM 175

A. Create a standard memorandum with standard margins and Calibri 12-point font with the following specifications:

1. Use the following header right justified on the right-hand margin ½" from the top of the page, replacing 99999 with your contestant number: (99999)-InvA-2
2. Use today's date.
3. Addressee should be the following: UIL Coaches
4. Sender should be the following: Mike Raffone
5. Subject should be the following in upper/lowercase: District Test
6. Use the following paragraphs for the body, importing/embedding the chart/graph from Part II and the formulas from Part I where indicated:

The graph below represents the scores in ascending order for the participants in our district for the Computer Applications Contest. A perfect score on the test was 300, and one of our participants attained that score.

**[Paste the chart from Part II here, leaving one blank line before and after the chart.
Indent at least ½" and center between the left and right margins.
Be sure nothing is truncated or wrapped and everything is easily readable.]**

The following formulas were used in our calculations.

ID: [Insert the formula from Cell D3 in Part I.]

Average: [Insert the formula from Cell C10 in Part I.]

Median: [Insert the formula from Cell C11 in Part I.]

Maximum: [Insert the formula from Cell C12 in Part I.]

Minimum: [Insert the formula from Cell C13 in Part I.]

B. Use the following reference initials: uil

C. Save the document as a file called **InvA-2**, and print in portrait orientation on one page.

2020 UIL Computer Applications Invitational Test A - Score Sheet - Printout 1

I. SPREADSHEET PRINTOUT		MAXIMUM			125
1	Format <i>(Grading for formatting, not correct data)</i>	PTS	GRD1	GRD2	GRD3
2	Printout in portrait orientation on 1 page with Calibri 12-point font	5			
3	All margins at least 1"	5			
4	Header shown 1" from top of page and 1" from right edge of page	5			
5	Printout shown centered vertically and horizontally on the page	5			
6	4 columns shown and no more	5			
7	Row and column indicators shown	5			
8	Heavy, black border shown below Row 2	5			
9	Thin, black lines shown around all cells (except bottom of Row 2) and these are all matching	5			
10	Print area shown as Cells A1 thru D13	5			
11	Cells A1 thru D1 merged with title centered	5			
12	Everything in Rows 1, 2, 10, 11, 12, and 13 shown in boldface type	5			
13	Everything in the printout shown centered in its respective cell	5			
14	All values in Column C shown as numbers with no decimals	5			
15	Nothing shown truncated or wrapped	5			
16	Format Total	70			
17	Calculations/Sort <i>(Grading for correct data, not formatting)</i>				
18	Detail data shown in descending order by Score	5			
19	All ID data shown matching key or equal to 1st 2 letters of Student field followed by 1st 3 letters of School field	10			
20	Cell C10 matching key or equal to the average of Cells C3 thru C8	10			
21	Cell C11 matching key or equal to the average of Cells C5 and C6	10			
22	Cell C12 matching key or equal to the highest value of Cells C3 thru C8	10			
23	Cell C13 matching key or equal to the lowest value of Cells C3 thru C8	10			
24	Calculations/Sort Total	55			
25	◆ SUBTOTAL PRINTOUT	125			
26	SUBTRACT DEDUCTION Maximum	-50	-	-	-
27	◆ Deduct 2 points for each typo or missing field in the printout, not otherwise graded. Header is subject to 2 typos if present & subject to 2 typos + 5 points for location if missing. For Line 19, if most values are correct, give credit, and take typos for incorrect or missing data. ◆ Errors include misspelling, missed capitalization or punctuation, extra, double, or omitted words, values, or rows, words that run together, incorrectly divided words, incorrect, wrapped or truncated words or values, or other errors.				
28	◆ TOTAL PRINTOUT	125			
29	GRADERS' INITIALS				

2020 UIL Computer Applications Invitational Test A - Score Sheet - Printout 2

II. DOCUMENT WITH CHART		MAXIMUM			175
1	Format <i>(Grading for formatting, not correct data)</i>	PTS	GRD1	GRD2	GRD3
2	Printout in portrait orientation on 1 page in Calibri 12-point font	5			
3	Top margin 1 1/2", left and right 1", and bottom at least 1"	5			
4	Header shown 1/2" from top of page and right aligned on right margin	5			
5	Everything blocked on the left not counting chart or header	5			
6	Guide words shown in all caps and followed by colons	5			
7	Data following guide words vertically left aligned	5			
8	Guide words double spaced	5			
9	Guide words in same order as key	5			
10	1 blank line between last formula or paragraph and reference initials	5			
11	Format Total	45			
12	Body/Chart/Formulas <i>(Grading for correct data from current test only, not formatting)</i>				
13	Add 5 points for each completed paragraph max	10			
14	2D clustered bar chart shown	5			
15	2D bar chart centered between margins, indented at least 1/2"	5			
16	1 blank line between Paragraph 1 and chart and between chart and Paragraph 2 <i>(part of Paragraph 2 must be present for credit)</i>	5			
17	Bars shown as grey shading with black borders	5			
18	Title centered above chart in all caps, boldface type	5			
19	6 bars shown in order matching key	5			
20	X-axis scale shown matching key	10			
21	Axis title for Y-axis shown in bold, upper/lowercase type	5			
22	Axis title for Y-axis shown with printing in horizontal format with black border	5			
23	Legend shown to right of chart	5			
24	Legend shown in boldface type with black border	5			
25	Black border shown around plot area and chart area	10			
26	ID formula matching key	10			
27	Add 5 points for each of remaining 4 formulas starting with =INT(and ending with)) max	20			
28	Add 5 points for each of remaining 4 formulas matching the data shown as the parameter of each of the INT functions on the key <i>(credit is given whether or not INT function is present as long as data matched that inside the parentheses)</i> max	20			
29	Body/Chart/Formulas Total	130			
30	❖ SUBTOTAL PRINTOUT	175			
31	SUBTRACT DEDUCTION Maximum	-50	-	-	-
32	<ul style="list-style-type: none"> ❖ Deduct 2 points for each typo or missing field in printout, not otherwise graded. Header is subject to 2 typos if present & subject to 2 typos + 5 points for location if missing. ❖ Errors include misspelling, missed capitalization or punctuation, extra, double, or omitted words, values or rows, words that run together, incorrectly divided words, incorrect, wrapped or truncated words or values or other errors. ❖ Stop grading where the student stopped typing. <i>(i.e. if a student typed last formula or the label preceding the last formula, he gets credit for all of paragraphs completed even if they are incomplete or missing, and typos are taken for the entire document.)</i> 				
33	❖ TOTAL PRINTOUT 2	175			
34	GRADERS' INITIALS				

Contestant Number _____

2020 UIL Computer Applications Invitational Test A - Score Sheet

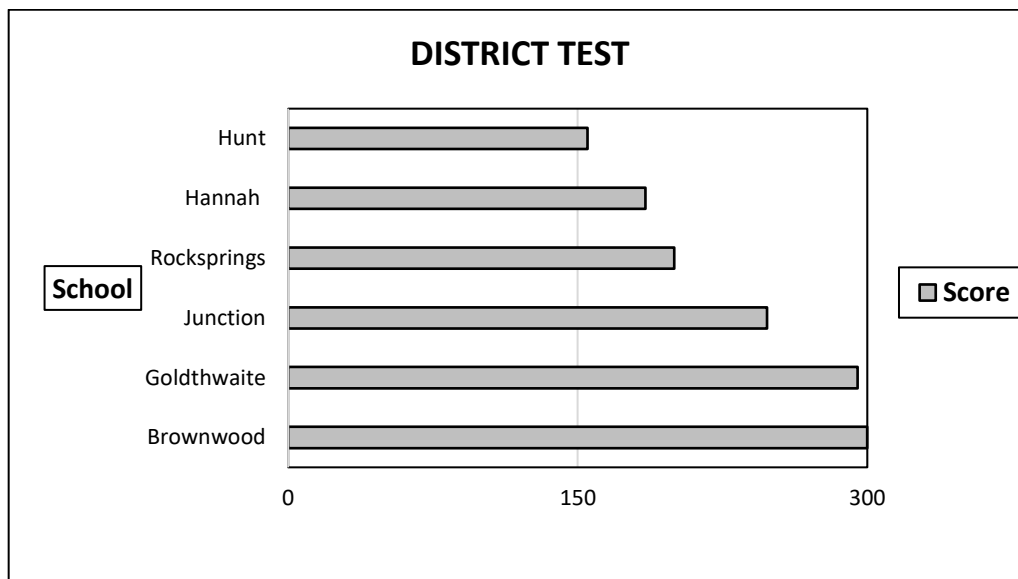
FINAL SCORE

❖ TOTAL PRINTOUT 1	125			
❖ TOTAL PRINTOUT 2	175			
❖ TOTAL SCORE	300			
GRADERS' INITIALS				

	A	B	C	D
1	ANALYSIS OF SCORES			
2	Student	School	Score	ID
3	Jim Sox	Brownwood	300	JiBro
4	Jacob Slatter	Goldthwaite	295	JaGol
5	Trina Woods	Junction	248	TrJun
6	Dewey Hafta	Rocksprings	200	DeRoc
7	Harley Werken	Hannah	185	HaHan
8	Will Wynn	Hunt	155	WiHun
9				
10		Average	230	
11		Median	224	
12		Maximum	300	
13		Minimum	155	

TO: UIL Coaches
FROM: Mike Raffone
DATE: Current Date
SUBJECT: District Test

The graph below represents the scores in ascending order for the participants in our district for the Computer Applications Contest. A perfect score on the test was 300, and one of our participants attained that score.



The following formulas were used in our calculations.

ID: =LEFT(A3,2)&LEFT(B3,3)

Average: =INT(AVERAGE(C3:C8))

Median: =INT(MEDIAN(C3:C8))

Maximum: =INT(MAX(C3:C8))

Minimum: =INT(MIN(C3:C8))

uil

2020 UIL Computer Applications Invitational Test A – Tiebreaker – Score Sheet

GENERAL INSTRUCTIONS: All contestants take the tiebreaker component of the test, but it is only to be scored if a tie occurs in the top six places.

I. CALCULATE GROSS WORDS PER MINUTE:

- A. Circle all errors on the tied contestants' papers.
- B. Determine the gross words per minute.
 - 1. Find the number of words typed to the right of the last complete line typed by contestant.
 - 2. Add the number of words in the last line if it is incomplete to the tally.
 - 3. Divide the number by five to get the gross words per minute.
 - 4. For example, if a contestant typed twenty lines plus seven words on the next line, add the number out to the right of the completed line plus seven.
 - 5. Divide by five to get gross words per minute.

II. DETERMINE THE GROSS WORDS PER MINUTE

III. DEDUCT ONE POINT FOR EACH ERROR

IV. ✓ TOTAL - GROSS WPM TYPED LESS ERRORS

V. ADD FIVE BONUS POINT FOR EACH SUCCESS

FORMAT	Top margin 1½"			
	Left margin 1"			
	Right margin 1"			
	Bottom margin 1 – 1 ½"			
TITLE	Title in boldface type			
	Title centered			
	3 blank lines between title and body			
BODY	Body of report single spaced			
	Paragraphs not indented			
	Double spaced between paragraphs			
¶ 1	Add 5 points for each degree symbol °	max 10		
¶ 3	Tilde on n in Niño			
✓ TOTAL - BONUS POINTS				
✓ GRAND TOTAL-WPM PLUS BONUS POINTS				
GRADERS' INITIALS				

BORNEO

Borneo is the third-largest island in the world and the largest in Asia. It is located at 01°N 114°E	20
in the Greater Sunda Islands Archipelago. At the geographic center of Maritime Southeast Asia,	34
it is situated north of Java, east of Sumatra and west of Sulawesi.	47
Borneo is home to one of the oldest rainforests in the world, estimated at about 140 million	64
years old. It is the center of the evolution and dispersal of many endemic species of plants	81
and animals, and the rainforest is one of the few residual natural habitats for the endangered	97
Bornean orangutan. It is a significant refuge for many endemic forest species, including the	111
Borneo elephant, the eastern Sumatran rhinoceros, the Bornean clouded leopard, the Hose's	123
palm civet and the Dayak fruit bat.	130
The island used to have extensive rainforest cover, but the coverage has been reduced due to	146
substantial logging by the Indonesian and Malaysian wood industry. Half of the annual global	160
tropical timber acquisition comes from Borneo. Palm oil plantations have been widely	172
developed and are rapidly encroaching on the last remnants of primary rainforest. The practice	186
of starting forest fires, beginning in 1997 by the locals to clear the forests for plantations, were	203
intensified by an extraordinarily dry El Niño season, worsening the annual shrinkage of the	217
rainforest. During these fires, hotspots were visible on satellite images and the resulting haze	231
frequently affected Brunei, Indonesia and Malaysia.	237

UIL Computer Applications Tests Instructions and Scoring

I. Preparation

A. Setup

1. Contestants should set up their equipment during the 30 to 45 minutes prior to the scheduled time for the contest, and test to be sure all hardware and software components are working, and leave all applications open at the start of the contest.
2. Students from the same school may not sit adjacent to each other.
3. Roll is taken, and adjustments are made for alternates 10 minutes before the scheduled contest time.
4. Coaches are asked to leave 5 minutes before the scheduled time for the contest, and they are given a copy of the test to take while students are taking the test.
 - a. Coaches take tests individually or in groups at a different location than students.
 - b. Coaches gain insight of areas that will be complicated to grade by taking the test.
5. Be certain all students' work spaces are cleared of everything except computer, printer, optional keyboard, keypad and mouse, and writing instruments (i.e. no *Handbooks* or printed materials).
6. **If the contest uses downloaded Starter Files, be sure all students have the files or allow them to copy the files prior to starting the contest from a flash drive.**

B. Equipment

1. Each student must have a laptop/notebook computer, printer, and saving device, such as a floppy drive, a thumb/flash drive, or a CD.
2. Competitors may have an external mouse, keyboard, and keypad, but not an external hard drive.
3. **No equipment may be shared by students during contests, and networked systems may not be used.**

C. Software

1. Microsoft Office 2010, 2013 or 2016 or a more current version, but no older version.
2. Spreadsheet elements must be done in Excel; database elements, in Access; and documents, in Word.
3. Graders may check students' saving device to verify that the appropriate application and element was used for a given printout, and if the correct application/element was not used, that printout is not graded. (i.e. If a report is requested in Access, printing a table in Access or Excel is not acceptable.)

II. Contest

A. 5-minute Tiebreaker

1. Tiebreakers are distributed to all students face down. (Manila envelopes are passed out, if you want all tests to be collected into an envelope to be turned in at contest end as is done at the State Meet.)
2. To start the tiebreaker, the director should ask all competitors to turn over their tiebreaker and type until time is called for the 5 minute test without printing during the tiebreaker time period.
3. If a student finishes a tiebreaker, he/she starts again at the beginning to type as much as possible.
4. At the end of 5 minutes, the director should ask all students to stop typing and raise their hands.
5. If it is a large group, ask half of the competitors to print their files, and when these are complete, ask the other half to print their files.
6. Director should ask all competitors to put their Contestant number in the upper right corner of every page of their printed tiebreaker and on the manila envelope, if this is used.
7. Director should ask all competitors to pass their tiebreaker in to the officials (or ask them to put the document into their manila folder, as we do at State).

B. 30-minute Test

1. Pass out tests with cover sheets showing so students may not view the test, and ask assistants to watch that students do not view the test.
2. Preview time is 3 minutes beginning when the director asks students to open tests and begin.
3. Test is 30 minutes.
 - a. Test should start immediately after the 3-minute preview period.
 - b. Encourage students to save frequently.
 - c. Give a 10-minute warning when there are 10 minutes left in the contest.
 - d. Give a 2-minute warning where there are 2 minutes left in the contest.
 - e. At the end of 30 minutes, the director should stop the contest and ask all students to raise their hands until all printing has ceased.
 - f. Printouts initiated during the actual 30-minute contest will be graded. Printing may continue into the post-test period, but may not be initiated after time is called.

C. Equipment malfunction during a contest

1. If a problem occurs during the tiebreaker, every effort must be made to correct the problem or the student may NOT participate in the 3-minute preview or 30-minute test. A student may not continue to try to make his equipment work during the preview as no one may use computers at that time.
 - a. If a student does not create a tiebreaker, but his equipment is repaired, he/she may continue with the actual 3-minute preview and 30-minute contest.
 - b. In case of a tie, the student without a tiebreaker paper automatically loses the tie.
2. Prior to a contest, every effort should be made to correct equipment problems by substituting equipment, keyboards, printers, etc. with a backup or borrowed equipment from another contestant or from the contest director, if possible.
3. The tiebreaker output should be proof that everything was working at the beginning of the contest.
4. **A contestant should raise his/her hand and advise the contest director during the contest** if any equipment problems occur.
5. One of the director's assistants should be assigned to attempt to resolve the problem. **The assigned assistant must not be the student's coach or a related party.**
6. If a system is inoperative and the problem cannot be resolved, the contestant can turn in only what he or she has completed before the equipment failed; and, after the contest, he or she can print anything that had been saved onto diskette/cd/flash drive on a different system or on the same system that has been made workable with the assistant overseeing. **No changes may be made to any printout.**
7. If the problem is a printer and it cannot be resolved within 5 minutes time, the student may continue working the test and saving to his/her saving device. He/she will be allowed to print from the saving device after the contest on the same system that has been made workable or on a different system with the assistant overseeing. **No additional changes may be made to any printout.**
8. **A contestant may not complete the contest at a later time.**
9. If a contestant has not attempted any printing before the two-minute warning and a printer malfunctions, the process is the same, but only one printout will be graded.
10. Printing may only be done after conclusion of a contest if both of the following have occurred.
 - a. **The contest director was apprised of a malfunction during the contest.**
 - b. **Time was expended during the contest by an assistant addressing the problem.**

D. Conclusion

1. Have all students select their Printout 1 and 2 and be sure their contestant number is on each page.
2. If a student printed a chart or graph separate from a document that he/she did not have time to embed in a document, the student should put his/her contestant number in the upper right corner and turn this in along with printout(s). Credit will be given for some chart elements that are correct, but all credit will be lost for margins, indenting a chart, spacing before and after a chart, etc. If a student's printout already has a chart or graph embedded in a printed document, the extra chart is not graded, even if the chart in the document was simply a placeholder from a template.
3. Have students label their saving device with their Contestant number.
4. Turn all printouts and students' saving device in to officials (or place them in manila envelopes).
5. If you use manila envelopes, warn that no printouts will be graded that are not in their envelope.
6. Explain that if a student turns in more than one printout for one of their documents, the graders will arbitrarily grade the first one encountered, whichever that is. No attempt will be made by graders to determine which is the better printout.
7. Ask students to verify that their Contestant number is on every page being turned in for grading, as well as on the manila envelope, if you are using envelopes.
8. Ask students to pass in their tests and saving devices (or envelopes with these inside).
9. Ask students then to pass in their scratch paper to be put in the trash.
10. Have students remove all equipment or make arrangements to remove it after grading.

III. Grading

A. All coaches are required to grade.

1. If a coach cannot grade, it is the coach's responsibility to provide a substitute, preferably someone somewhat familiar with the contest, and advise the director that they are providing a substitute.
2. If a coach does not grade, the director can disqualify his/her student(s).

B. View all papers from each contestant.

1. Consider covering ALL contestant numbers with post-it notes.
2. Verify that all pages have contestant numbers. If a printout does not have identification, the director can try to determine which contestant produced it and grade it.
3. Verify that there are no "extra" printouts. If there are more than one of a given printout, simply take the first one you encounter as the one to grade, and mark an X on the "extra" printout.
4. If there is an "extra" printout with a chart or graph, verify that the document with which it is associated does not have a chart or graph already printed. If it does, mark X on the stand-alone chart and grade the chart/graph embedded in the document, even if it is from a template.
5. Paperclip all printouts to be graded together (and to the outside of the envelope if using these).
6. Tiebreakers remain in a separate stack or are returned to the student's envelope.

C. Sort tests into 1A, 2A, 3A, etc., and arrange coaches into like groups.

1. Give 1A tests to 3A coaches, 2A tests to 4A coaches, 3A tests to 5A coaches, 4A tests to 1A coaches, and 5A tests to 2A coaches or something of this ilk.
2. No coach should grade his/her own student's printouts.

D. Follow these grading rules.

1. Grading is all or nothing (i.e. each item on the score sheet is worth zero or the specified points).
2. Zero is the lowest possible grade for a printout. There are no negative grades for either printout.
3. Rulers, other than those in computer software, should not be used during the contest or during grading. Grading of centering, margins, etc. is a visual check. Do not attempt to be "ruler-exact." Do not fold papers to ascertain an exact center.
4. If there is a significant error on the test, notify the UIL state office or contact the State Contest Director for clarification. Mistakes in the keys should be corrected, and all printouts should be graded on correctness, not on an incorrect answer. That is, if a word is obviously misspelled (like *alternations* instead of *alterations*), credit is given for either spelling.
5. **Do not disqualify a printout on "mailability" standards.**
6. Allow about ¼" differential between requested margins and printed margins.
7. Right-justified data in a printout may vary between alphabetic data and numeric data with numeric data leaving the rightmost character position in numbers presumably for a minus sign if one were present.
8. Do not grade parts of a template that a contestant has not entered in a document. No credit is given for possible correct information in a document that was brought in as a template in the complimentary close, reference initials, or other parts of a document beyond where a contestant had entered information in the document.
9. If a contestant skipped to alter information at the bottom of a template for a document, such as a sender's name, then he/she effectively completed the entire document and gets credit for completing all paragraphs even if one or more are incomplete or missing altogether. In these cases, the entire document is graded for typos, and credit is given for correct data in the close, sender's name, etc.
10. If a contestant completed most of a paragraph and omitted a sentence or line, the student gets credit for completing the paragraph if it appears that he or she inadvertently skipped over a portion and continued typing beyond that part. Deduct typos for the omitted portion.

E. Typographical errors are graded with the following criteria.

1. All of the following are considered typos.

misspelling	incorrect numbers	missed capitalization
missed punctuation	double words	incorrect formatting
words run together	incorrect row/line spacing, either extra or omitted	
incorrectly divided words	incorrect borders/lines, either extra or omitted	
omitted words or numbers	missing or extra parts of a chart or graph	
2. If an error is a global error as all Group Headers have the same misspelled word, it is one typo or if an entire column of numbers is formatted wrong, it is one typo.
3. ***Do not* count off for differences between one and two spaces following some punctuation marks** as this often is difficult to differentiate.
4. ***Do not* count off twice for an error.**
5. If deductions are made directly on the score sheet, do not then count off for an error as a typo.
6. If deductions are made on one printout, do not count off for the same error on another printout.

F. Grade all Printout 1's together.

1. As you encounter questions, be certain that all coaches understand how the element is to be graded so all papers will reflect the same grading.
 2. If there is an error on a test, call the State Contest Director for resolution (830.370.8966).
 3. Have 3 coaches grade each paper, and then have a 4th coach verify all agree and transfer the final grade to the Final Score sheet.
 4. If there is a discrepancy among the 3 grades, the 4th grader reviews the problem with the original graders for the test and resolves the problem or contacts the director to resolve it.
 5. When all Printout 1 papers are completed, start grading Printout 2.
 - a. Ask all coaches to walk thru the grading of Printout 2 together.
 - b. Follow the same procedure as used in Printout 1.
 - c. Grade all Printout 2 papers together.
 6. Return all tests to the director (clipped to their envelope, if using these).
- G. Tiebreakers are only graded to break ties for first thru sixth place, and the director grades these.
- H. Director enters all grades into the official website.

IV. Verification

- A. Unofficial results may or may not be posted prior to verification at the discretion of the contest director.
- B. Graded tests along with score sheets, a copy of the test itself, and copies of the answer keys are examined by contestants and their coaches during verification.
- C. Only a contestant's coach may examine the test with him/her or a person that has been approved by the contest director.
- D. Contestants and coaches are not to compare papers or examine anyone's test but their own.
- E. Verification is not to exceed 15 minutes.
- F. Report questions or errors in grading or recording scores to the contest director.
 1. The contest director will determine if the problem in question is an error.
 2. The contest director will recalculate the score and initial the change.
- G. Those not present during verification period forfeit the opportunity to raise objections.
- H. Official results will be announced after all questions have been resolved and rankings have been corrected, if necessary.

V. Ties

- A. Ties from first through sixth place are to be broken using the five-minute tiebreaker document.
- B. If the scores on the tiebreaker document are the same, then a tie exists.
- C. Should there be a tie for first place, there is no second place. Should there be a tie for second place, then there is no third, and so on.
- D. Mailability is no longer relied on to determine ties.

2020 UIL Computer Applications Invitational Test B - Tiebreaker

General tiebreaker test instructions: The tiebreaker is a five-minute timed typing test to be completed using Calibri 12-point font in Word. At the end of that time, the contestants will be instructed to send their output to their printers. Scores will be calculated based on gross words per minute typed less one point per word, space, punctuation mark, or capitalization error plus bonus points for following directions or for correct format for a given type of document.

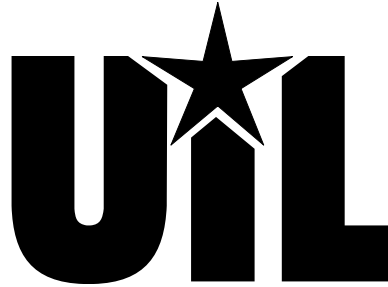
- I. **COPY** a document in Calibri 12-point type and print.
 - A. Enter the document on the next page in an unbound report format.
 1. Use a 1 ½" top margin and conventional side and bottom margins.
 2. Center the following title in boldface type using all caps: **ALGAE BLOOM**
 - B. Save document as **Tb-InvB**.
 - C. Write your contestant number and **Tb-InvB** in the upper right-hand corner of your printout.
- II. **STOP** when time is called and print your document when instructed to do so.

An algae bloom is a swift increase in the population of algae in marine or freshwater systems and is often known by the discoloration in the water from their pigments. The term algae includes many types of aquatic photosynthetic organisms, both macroscopic, multicellular organisms like seaweed and microscopic, unicellular organisms like cyanobacteria. Some algae blooms on the Pacific coast have been linked to natural incidences of large-scale climatic fluctuations such as El Niño events.

A harmful algae bloom (HAB) is an algae bloom that causes negative impacts to other organisms by the manufacture of natural toxins, mechanical damage to other organisms, or by other means. HABs are often associated with large-scale marine mortality events and have related to various types of shellfish poisonings. In 2010, dissolved iron in the ash from the Eyjafjallajökull volcano triggered a plankton bloom in the North Atlantic. Another notable HAB occurrence was in 2014. Blue-green algae caused a bloom in the western basin of Lake Erie, poisoning the Toledo, Ohio water system connected to almost 500,000 people.

Many algae blooms are the result of nitrogen or phosphorus from fertilizer runoff entering the aquatic system and causing excessive growth of algae. An algae bloom affects the entire ecosystem. It can have harmful effects, like blocking the sunlight from reaching other organisms, causing a depletion of oxygen levels in the water, and, depending on the organism, secreting toxins into the water.

UNIVERSITY INTERSCHOLASTIC LEAGUE



Computer Applications

INVITATIONAL B

2020

***DO NOT OPEN YOUR TEST UNTIL YOU ARE TOLD TO BEGIN.
DO NOT LEAVE THE ROOM UNTIL TIME IS CALLED.***

2020 UIL Computer Applications Invitational Test B

General test instructions: Follow instructions to create printouts for this contest. When time is called, printouts will be graded. Calibri 12-point font must be used for Excel and Word documents, but Access default font size is acceptable for database reports.

I. DATABASE TABLE

MAXIMUM 100

- A. Create a blank database named **InvB**.
- B. Create a table in design view named **Apartments** with field properties as shown at right.
- C. Populate the table in datasheet view with the data below.

Field Name	Data Type	Description (Optional)
Complex	Short Text	25 characters
Address	Short Text	25 characters
Description	Short Text	5 characters
Rent	Number	Integer, standard, 0 decimals
Distance	Number	Integer, standard, 0 decimals
Gas Cost	Number	Integer, standard, 0 decimals
Monthly Cost	Number	Integer, standard, 0 decimals

Complex	Address	Description	Rent	Distance	Gas Cost	Monthly Cost
Oceanside Apartments	2817 Avenue A	1Br	1,662	7		
Bay Area Flats	131 Bay Rd.	1Br	1,232	14		
River View Lofts	2333 Oak Ln.	Eff	1,172	22		
Harbor Rim Condos	1413 Harbor Rd.	1Br	1,825	6		
Poolside Complex	443 Main St.	Eff	1,053	26		

- D. Create update query in design view with the following specifications using **Apartments** table.
 1. Update the **Gas Cost** field with the following calculations.
 - a) Multiply the value in **Distance** x 2 x .55 x 22 to calculate the distance to and from work times the 2019 mileage rate of 55 cents allowable for each business mile driven times 22 workdays in a month. $[Distance] * 2 * 0.55 * 22$
 - b) Save the query as **UpdQry** and run it.
 2. Update the **Monthly Cost** by adding **Gas Cost** plus **Rent**.
 3. Save the query and run it.
- E. Create a report using the report wizard with all margins 1" and in landscape orientation with the following specifications.
 1. Use all fields from the **Apartments** table and group by **Description**.
 2. Sort by **Rent** in descending order.
 3. Calculate the minimum value for **Rent** and **Monthly Cost**.
 4. Use stepped layout and landscape orientation.
 5. Use the following title: **Apartment Comparison**
 6. Make the following modifications in design view.
 - a) Add the following header top aligned with the title and right aligned on the right margin, replacing 99999 with your contestant number: (99999)-InvB-1
 - b) Center the title between margins.
 - c) In the group footer, make the box with **Min** the same size and left aligned with the **Description** header and detail boxes, and replace **Min** with **Minimum**.
 - d) Center all column headings, detail data and summary values in their respective columns, but leave the *Summary for...* line left justified.
 - e) Make everything in the report black, boldface type except the detail data, the *Summary for...* line and the page footer, and make these plain, black type.
 7. Save your report and print it on one page.
- F. With the **Address** table open, select Word Merge from the Export Block of the External Data ribbon and specify to create a new document and link the data to it.

II. MODIFIED BLOCK LETTER WITH MERGED DATA

MAXIMUM 150

- A. Create a modified block letter with mixed punctuation with paragraphs blocked on the left margin without indentation, using Calibri 12-point type and with the following specifications.
 - 1. Use conventional margins.
 - 2. Use the following header 1" from the top edge of the page and right aligned on the right margin, replacing 99999 with your contestant number: (99999)-InvB-2
 - 3. Use today's date in long date format.
 - 4. Use the following inside address: Ms. Penny Wise, 123 Hopewell Rd., Los Angeles, CA 93802
 - 5. Use the following subject line in all caps: APARTMENT COMPARISON
 - 6. Use the following salutation: Dear Ms. Wise
- B. Click on the Edit Recipient List icon in the Start Mail Merge block of the Mailings ribbon and sort by **Monthly Cost** in ascending order.
- C. Use the following paragraphs for the body, merging the appropriate data in the first paragraph:

After reviewing the available rentals, the most optimum value is the **[Merge the Complex field]**. Although the rent, which is \$**[Merge the Rent field]**, is not one of the lower rents of the properties, this property has the lowest monthly cost, which is \$**[Merge Monthly Cost field]**. This monthly cost is calculated as the sum of the apartment rent plus the monthly value for miles driven in commuting, which includes gas and wear and tear on your car using the percentage allowed for business travel for tax deductions.

Attached is the compiled list of all the properties so that you can make a value judgment of which you prefer to rent. The calculations used are the following:

Gas Cost: **[Copy and paste the formula for Gas Cost field from the UpdQry in Part I]**

Monthly Cost: **[Copy and paste the formula for Monthly Cost field from the UpdQry in Part I]**

- D. Use the following complimentary close: Sincerely
- E. Use the following for the senders name and title on two lines: Hedda House, Apartment Rental Manager
- F. Use the following reference initials: uil
- G. Use the following enclosure notation: Enclosure
- H. Save the document as a file entitled **InvB-Doc**.
- I. Click on the Finish & Merge icon in the Mailings ribbon, and select edit individual documents and specify to Merge records from 1 to 1.
- J. Save the new document with merged data inserted as **InvB-Merged**, and print it in portrait orientation.

2020 UIL Computer Applications Invitational Test B - Score Sheet - Printout 1

I. DATABASE WITH REPORT		MAXIMUM			100
1	Format <i>(Grading for formatting, not correct data)</i>	PTS	GRD1	GRD2	GRD3
2	Printout in landscape orientation on 1 page	5			
3	All margins 1"	5			
4	Header top aligned with title and right aligned on right margin	5			
5	Title centered between margins	5			
6	7 columns of data and no more <i>(count column headings in group header)</i>	5			
7	All column headings matching key and in same order	5			
8	Everything in detail data, <i>Summary for...</i> line and page footer in plain, black type, and everything else in black, boldface type	5			
9	All detail and summary values shown as numbers with commas and no decimals	5			
10	Label in group footer shown as Minimum <i>(not Min, and not necessarily bold)</i>	5			
11	All column headings, detail data, and summary labels and values centered in their respective columns <i>(Summary for... line shown left justified)</i>	5			
12	Nothing shown truncated or wrapped <i>(see Summary for... descenders)</i>	5			
13	Format Total	55			
14	Grouping/Sorting/Calculations <i>(Grading for correct data, not formatting)</i>				
15	Grouping shown by Description	5			
16	Records shown in descending order by Rent in each group shown	5			
17	2 groups shown <i>(unless typo in Description column caused added group)</i>	5			
18	Correct records in each group	5			
19	All values in Gas Cost matching key or equal to Distance times 24.2	5			
20	All Monthly Cost values matching key or equal to Gas Cost plus Rent	10			
21	Summary values for Rent matching key or equal to lowest Rent value for each group	5			
22	Summary values for Monthly Cost matching key or equal to lowest Monthly Cost value for each group	5			
23	Grouping/Sorting/Calculations Total	45			
24	◆ SUBTOTAL PRINTOUT	100			
25	SUBTRACT DEDUCTION Maximum	-30	-	-	-
26	◆ Deduct 2 points for each typo in the printout. Header is subject to 2 typos, if present, and subject to 2 typos plus 5 points for location, if missing. Shading and borders are ignored in grading. ◆ Errors include misspelling, missed capitalization or punctuation, extra, double or omitted words, values or rows, words that run together, incorrectly divided words, incorrectly wrapped or truncated words or values or other errors.				
27	◆ TOTAL PRINTOUT	100			
28	GRADERS' INITIALS				

2020 UIL Computer Applications Invitational Test B - Score Sheet - Printout 2

II. DOCUMENT WITH MERGE/FORMULAS		MAXIMUM			150
1	Format <i>(Grading for formatting, not correct data)</i>	PTS	GRD1	GRD2	GRD3
2	Printout in portrait orientation on 1 page in Calibri 12-point font	5			
3	Top margin 2", left and right 1", and bottom at least 1"	5			
4	Header shown 1" from top of page and right aligned on right margin	5			
5	Today's date shown on top margin and keyed at center of page	10			
6	3 lines between date and inside address and 1 line between inside address and salutation and between salutation and subject and between subject and Paragraph 1	5			
7	Subject shown left justified and in all caps	5			
8	All paragraphs shown left aligned on the margin	5			
9	1 blank line between last formula or last paragraph and complimentary close and 3 blank lines between close and sender's name	5			
10	Sender's name and title shown on 2 lines	5			
11	Complimentary close and sender's name shown keyed at center of page	10			
12	1 blank line between sender's title and reference initials and between reference initials and enclosure notation	5			
13	Format Total	65			
14	Body of Document/Merge/Formulas <i>(Grading for correct data from current test, not formatting)</i>				
15	Add 5 points for each completed paragraph <i>(ignoring formulas/labels)</i> max	10			
16	Add 15 points for each merged field with data matching key for Complex, Rent and Monthly Cost or with data matching data from Printout 1 for the lowest value in Monthly Cost shown max	45			
17	*Gas Cost formula matching key or equal to any order of multiplicands that equal [Distance] times 24.2	15			
18	*Monthly Cost formula matching key with addends in either order	15			
19	Body of Document/Merge/Formulas Total	85			
20	♣ SUBTOTAL PRINTOUT	150			
21	SUBTRACT DEDUCTION Maximum	-40	-	-	-
22	<ul style="list-style-type: none"> ♣ Deduct 2 points for each typo or missing field in the printout, not otherwise graded. Header is subject to 2 typos, if present & subject to 2 typos + 5 points for location if missing. *Table names are optional, but if present, they must be in square brackets and followed by period or exclamation point. ♣ Errors include misspelling, missed capitalization or punctuation, extra, double, or omitted words, values, or rows, words that run together, incorrectly divided words, incorrect, wrapped or truncated words or values, or other errors. ♣ Stop grading where the student stopped typing. (i.e. if a student has a correct sender's name, he gets credit for all paragraphs completed even if they are incomplete or missing, but typos are taken for the entire document.) 				
23	♣ TOTAL PRINTOUT	150			
24	GRADERS' INITIALS				

2020 UIL Computer Applications Invitational Test B - Score Sheet

FINAL SCORE

❖ TOTAL PRINTOUT 1	100			
❖ TOTAL PRINTOUT 2	150			
❖ TOTAL SCORE	250			
GRADERS' INITIALS				

Design View of Access Report

The screenshot shows the Design View of an Access Report named "Apartment Comparison". The report is divided into several sections:

- Report Header:** Contains the title "Apartment Comparison" and the report ID "(99999)-InvB-1".
- Page Header:** A blank header row.
- Description Header:** A row with column headers: "Description", "Rent", "Complex", "Address", "Distance", "Gas Cost", and "Monthly Cost".
- Description:** A row with the column header "Description".
- Detail:** A row with the column headers "Rent", "Complex", "Address", "Distance", "Gas Cost", and "Monthly Cost".
- Description Footer:** A row with a summary formula: `= "Summary for " & " 'Description' = " & " " & [Description] & " (" & Count(*) & " " & IIf(Count(*)=1,"detail record","detail records") & ")"`.
- Page Footer:** A row with summary formulas: `Minimum =Min([Rent])` and `n([Monthly Cost])`.
- Page Footer:** A row with the current date: `=Now()`.
- Report Footer:** A row with page information: `UIL Computer Applications: TEST ANSWER KEY FOR GRADERS - PRINTOUT 1 = "Page " & [Page] & " of " & [Pages]`.

Apartment Comparison							(99999)-InvB-1
Description	Rent	Complex	Address	Distance	Gas Cost	Monthly Cost	
1Br							
	1,825	Harbor Rim Condos	1413 Harbor Rd.	6	145	1,970	
	1,662	Oceanside Apartments	2817 Avenue A	7	169	1,831	
	1,232	Bay Area Flats	131 Bay Rd.	14	339	1,571	
Summary for 'Description' = 1Br (3 detail records)							
Minimum	1,232					1,571	
Eff							
	1,172	River View Lofts	2333 Oak Ln.	22	532	1,704	
	1,053	Poolside Complex	443 Main St.	26	629	1,682	
Summary for 'Description' = Eff (2 detail records)							
Minimum	1,053					1,682	

Today's date

Ms. Penny Wise
123 Hopewell Rd.
Los Angeles, CA 93802

Dear Ms. Wise:

APARTMENT COMPARISON

After reviewing the available rentals, the most optimum value is the Bay Area Flats. Although the rent, which is \$1232, is not one of the lower rents of the properties, this property has the lowest monthly cost, which is \$1571. This monthly cost is calculated as the sum of the apartment rent plus the monthly value for miles driven in commuting, which includes gas and wear and tear on your car using the percentage allowed for business travel for tax deductions.

Attached is the compiled list of all the properties so that you can make a value judgment of which you prefer to rent. The calculations used are the following:

Gas Cost: $[\text{Distance}] * 2 * 0.55 * 22$

Monthly Cost: $[\text{Gas Cost}] + [\text{Rent}]$

Sincerely,

Hedda House
Apartment Rental Manager

uil

Enclosure

2020 UIL Computer Applications Invitational Test B - Tiebreaker - Score Sheet

GENERAL INSTRUCTIONS: All contestants take the tiebreaker component of the test, but it is only to be scored if a tie occurs in the top six places.

I. CALCULATE GROSS WORDS PER MINUTE:

- A. Circle all errors on the tied contestants' papers.
- B. Determine the gross words per minute.
 - 1. Find the number of words typed to the right of the last complete line typed by contestant.
 - 2. Add the number of words in the last line if it is incomplete to the tally.
 - 3. Divide the number by five to get the gross words per minute.
 - 4. For example, if a contestant typed twenty lines plus seven words on the next line, add the number out to the right of the completed line plus seven.
 - 5. Divide by five to get gross words per minute.

II. DETERMINE THE GROSS WORDS PER MINUTE _____

III. DEDUCT ONE POINT FOR EACH ERROR _____

IV. ✓ TOTAL - GROSS WPM TYPED LESS ERRORS _____

V. ADD FIVE BONUS POINT FOR EACH SUCCESS

FORMAT	Top margin 1 ½"			
	Left margin 1"			
	Right margin 1"			
	Bottom margin 1 - 1 ½"			
	Left and right margins equal			
	Everything in Calibri 12 point font			
TITLE	Title in boldface type			
	Title centered			
	3 blank lines between title and body			
BODY	Body of report double spaced			
	Paragraphs indented			
¶ 1	Tilde accent in word Niño			
¶ 2	Umlaut accent in word Eyjafjallajökull			
Credit for Page 2 only if Page 2 is present:				
PAGE 2	No single line paragraph ending Page 1			
	No single line paragraph beginning Page 2			
	Top margin 1" on Page 2			
	Page number in upper right margin			
	Text double-spaced down from page number			
✓ TOTAL - BONUS POINTS				
✓ GRAND TOTAL-WPM PLUS BONUS POINTS				
GRADERS' INITIALS				

ALGAE BLOOM

An algae bloom is a swift increase in the population of algae in marine or freshwater	18
systems and is often known by the discoloration in the water from their pigments. The term	34
algae includes many types of aquatic photosynthetic organisms, both macroscopic, multicellular	45
organisms like seaweed and microscopic, unicellular organisms like cyanobacteria. Some algae	56
blooms on the Pacific coast have been linked to natural incidences of large-scale climatic	70
fluctuations such as El Niño events.	76
A harmful algae bloom (HAB) is an algae bloom that causes negative impacts to other	91
organisms by the manufacture of natural toxins, mechanical damage to other organisms,	103
or by other means. HABs are often associated with large-scale marine mortality events	116
and have related to various types of shellfish poisonings. In 2010, dissolved iron in the ash	132
from the Eyjafjallajökull volcano triggered a plankton bloom in the North Atlantic. Another	145
notable HAB occurrence was in 2014. Blue-green algae caused a bloom in the western basin of	161
Lake Erie, poisoning the Toledo, Ohio water system connected to almost 500,000 people.	174
Many algae blooms are the result of nitrogen or phosphorus from fertilizer runoff	187
entering the aquatic system and causing excessive growth of algae. An algae bloom affects	201
the entire ecosystem. It can have harmful effects, like blocking the sunlight from reaching	215
other organisms, causing a depletion of oxygen levels in the water, and, depending on the	230
organism, secreting toxins into the water.	236

2020 UIL Computer Applications District Test - Tiebreaker

General tiebreaker test instructions: The tiebreaker is a five-minute timed typing test to be completed using Calibri 12-point font in Word. At the end of that time, the contestants will be instructed to send their output to their printers. Scores will be calculated based on gross words per minute typed less one point per word, space, punctuation mark, or capitalization error plus bonus points for following directions or for correct format for a given type of document.

- I. **COPY** a document in Calibri 12-point type and print.
 - A. Enter the document on the next page in a left-bound report format.
 - B. Use a 1 ½ " top margin and conventional side and bottom margins.
 - C. Center the following title in boldface type using all caps: **THE FRENCH FRANC**
- II. Save the document as **Tb-Dist**.
- III. Write your contestant number and **Tb-Dist** in the upper right-hand corner of your printout.
- IV. **STOP** when time is called and print your document when instructed to do so.

The French franc (FF), was a currency of the country of France. During the years 1360 through 1641, it was the name of coins that were worth one *livre tournois*. It was reinstated in decimal form in 1795. After two centuries of inflation, it was revalued in 1960, with each new franc (NF) being worth 100 old francs. The NF designation was continued for a few years until the introduction of the Euro in 1999 (for accounting purposes) and 2002 (for coins and banknotes).

The very first franc was a gold coin introduced in 1360 to pay the ransom of King John II of France. The coin design showed him on a lavishly decorated horse, earning it the name *franc à cheval*, meaning "free on horse" in French. The obverse side, like other French coins, gives the king's title as *Francorum Rex*, "King of the Franks" in Latin. Its value was set as one *livre tournois* (a money of account). John II, however, did not have the necessary gold to make enough francs to pay his ransom, and he voluntarily returned to English captivity.

John II died as a prisoner in England and his son, Charles V, was left to pick up the pieces. Charles V pursued a policy of reform, including stable coinage. An edict dated April 20, 1365, established the centerpiece of this policy, a gold coin officially called the *denier d'or aux fleurs de lis*, which had a standing figure of the king on its obverse, pictured under a canopy. Its value in money of account was one *livre tournois*, just like the *franc à cheval*, and this coin is universally known as a *franc à pied*. In accordance with the theories of the mathematician, economist and royal advisor Nicolas Oresme, Charles struck fewer coins of better gold than his ancestors. In the accompanying deflation, both prices and wages fell, but wages fell faster, and debtors had to settle in better money than they had borrowed. The Mayor of Paris, Étienne Marcel, exploited their discontent to lead a revolt which forced Charles V out of the city. The franc fared better. It became associated with money constant at one *livre tournois*.

UNIVERSITY INTERSCHOLASTIC LEAGUE



Computer Applications

DISTRICT

2020

***DO NOT OPEN YOUR TEST UNTIL YOU ARE TOLD TO BEGIN.
DO NOT LEAVE THE ROOM UNTIL TIME IS CALLED.***

2020 UIL Computer Applications District Test

General test instructions: Follow instructions to create printouts for this contest. When time is called, printouts will be graded. Calibri 12-point font must be used for Excel and Word documents, but Access default font size is acceptable for database reports.

I. SPREADSHEET

- A. Create a spreadsheet with following data using Calibri 12-point type. (*Be certain that there are no spaces in your entered data.*)
- B. Select Cells A1 thru A6 and click on the Text to Columns icon in the Data Tools block of the Data ribbon.
 1. Select the Delimited radio button, if it is not already selected.
 2. Select Comma for the delimiters.
 3. Select General for column data format.
 4. **Change the Destination to be \$B\$1.**
 5. Click finish to convert your text to columns in Cells B1 thru E6.
- C. Select everything in Column E and format as numbers with commas and no decimals.
- D. In Cell F2, use an INT function with the following calculation as the parameter and format as a number with no decimals.
 1. Subtract Cell D2 from "12/31/2019"
 2. Divide the result by 365.25
- E. In Cell G2, multiply Cell E2 times .03 and format as a number with commas and no decimals.
- F. Select Cells F2 and G2 and fill down to F6 thru G6.
- G. Sort your spreadsheet in descending order by **Salary** and center everything in Cells B1 thru G6.
- H. Save your spreadsheet as **Employees**.

	A
1	FirstName,LastName,StartDate,Salary,YrsEmployed,AnnualSaving
2	Ben,Thair,11/1/2009,48000
3	Mick,Stupp,7/14/2013,31500
4	Justin,Inche,2/12/2014,32000
5	Jim,Locher,1/3/2008,45500
6	Wanda,Rinn,9/12/2018,28000

II. DOCUMENT WITH TABLE

MAXIMUM 150

- A. Create a modified block letter with mixed punctuation, indented paragraphs and Calibri 12-point font with conventional margins and the following specifications:
 1. Use the following header 1" from the top of the page, right justified on the right margin, replacing 99999 with your contestant number: (99999)-Dist-1
 2. Use today's date.
 3. Use the following inside address with name and company on separate lines: Hedda Verheles, Sew It Seams, 1224 Orbital Way, Clear Lake, TX 78520
 4. Use the following salutation: Dear Ms. Verheles
 5. Use the following subject in all caps: EMPLOYEES' SAVINGS PLAN
 6. Use the following paragraphs for body, adding table from **Part I** where indicated:

Here is our report on the proposed savings plan for your employees. If your company had instituted a savings plan as suggested, their contributions would be as shown.

**[Copy Cells B1 thru G6 from the spreadsheet in Part I and paste here.
Center between margins and indent at least ½" leaving 1 blank line above and below the table.]**

The attached dictates how much each person will put in our savings plan for 25 years and how much he or she will realize after that period, including the 3% interest compounded.

7. Use the following complimentary close: Sincerely yours
 8. Use the following sender's information: Celia Fate
 9. Use the following reference initials: uil
 10. Use the following enclosure notation: Enclosure
- B. Save your document as **Dist-1** and print on one page in portrait orientation.

III. DATABASE WITH REPORT

MAXIMUM 150

- A. Create a database named **Employees**.
- B. Import the **Employees** spreadsheet created in **Part I** to a new table with the following steps.
 - 1. First row contains column headings.
 - 2. Use no primary key.
 - 3. Save the table as **Employees**.
- C. Change the field properties to match those below and add the 2 fields after the **AnnualSaving** field with the field properties as shown.

Field Name	Data Type	Description (Optional)
FirstName,LastName,StartDate,Salary,YrsEmployed,AnnualSaving	Short Text	75 characters
FirstName	Short Text	25 characters
LastName	Short Text	25 characters
StartDate	Date/Time	Short date
Salary	Number	Double, standard, 0 decimals
YrsEmployed	Number	Integer, fixed 0 decimals
AnnualSaving	Number	Double, standard, 0 decimals
Saving after 25 Years	Number	Double, standard, 0 decimals
Saving+Interest after 25 Years	Number	Double, standard, 0 decimals

- D. Create an update query in design view using the **Employees** table with the following specifications.
 - 1. Update the **Saving after 25 Years** field by multiplying the **AnnualSaving** field times 25.
 - 2. Update the **Saving+Interest after 25 Years** field using the following specifications.
 - a) Use an FV function with the following parameters.
 - (1) Rate should be 0.03
 - (2) Number of periods should be 25
 - (3) Payment field should be the **AnnualSaving** field.
 - b) Add an Abs function with the entire FV function as its parameter. *(This will require putting parentheses around the entire FV function and preceding this with Abs.)*
 - 3. Save the query as **UpdQry** and run it.
- E. Use the report wizard to create a one-page printout with 1" margins and the following specifications.
 - 1. Select the following fields from the **Employees** table: **LastName, Salary, AnnualSaving, Saving after 25 Years** and **Saving+Interest after 25 Years**
 - 2. Use no grouping, sorting or calculations.
 - 3. Use tabular layout and landscape orientation.
 - 4. Use the following title: **Potential Savings after 25 Years**
 - 5. Make the following modifications in design view:
 - a) Use the following header top aligned with the title and right aligned on the right margins, replacing 99999 with your contestant number: (99999)-Dist-2
 - b) Expand the report footer about 1¾" and add the following in the footer.
 - (1) Select everything in first column of **Employees** table and paste into report footer. Right align data in the box and right align box with Page field of the page footer.
 - (2) Copy the following formulas from **Part I** and paste into the report footer, stacked in this order: **YrsEmployed** and **AnnualSaving**.
 - (3) Copy the following formulas from the **UpdQry** in **Part III** and paste into the report footer and stack below the previous formulas in this order: **Saving after 25 Years** and **Saving+Interest after 25 Years**.
 - (4) Select all formulas and left align with the Now() formula from the page footer.
 - 6. Make everything in the report header and page header black, bold type, and make everything else plain, black type.
- F. Make sure nothing is truncated or wrapped
- G. Save your report and print it on one page in landscape orientation.

H. Your report should have the appearance shown. *(Data may be incorrect, shading is not graded; colons represent missing data, date and page should be generated on the bottom margin.)*

Potential Savings after 25 Years

(99999)-Dist-2

LastName	Salary	AnnualSaving	Saving after 25 Years	Saving+Interest after 25 Years
Thair	48,000	1,440	36,000	52,501
:	:	:	:	:
=INT(.....)			FirstName,LastName,StartDate,Salary,YrsEmployed,AnnualSaving	
=E2.....			Ben,Thair,11/1/2009,48000	
:	:	:	:	:

2020 UIL Computer Applications District Test - Score Sheet - Printout 1

I. DOCUMENT WITH TABLE		MAXIMUM			150
1	Format <i>(Grading for formatting, not correct data)</i>	PTS	GRD1	GRD2	GRD3
2	Printout in portrait orientation on 1 page in Calibri 12-point font	5			
3	Top margin 2", left and right 1", and bottom at least 1"	5			
4	Header shown 1" from top of page and right aligned on right margin	5			
5	Today's date shown on top margin	5			
6	Date shown keyed at center of page	5			
7	3 lines between date & inside address and 1 line between inside address & salutation	5			
8	1 line between salutation & subject and between subject & Paragraph 1	5			
9	Subject shown indented and in all caps	5			
10	All paragraphs shown indented	5			
11	1 blank line between last paragraph and complimentary close and 3 blank lines between close and sender's name	5			
12	Complimentary close and sender's name shown keyed starting at center of page	5			
13	1 blank line between sender's name and reference initials and between reference initials and enclosure notation	5			
14	Format Total	60			
15	Body of Document/Table <i>(Grading for correct data from current test, not formatting)</i>				
16	Add 5 points for each completed paragraph max	10			
17	Table shown between Paragraph 1 and 2	5			
18	Table centered between margins and indented at least 1/2"	5			
19	1 blank line between Paragraph 1 and table and between table and Paragraph 2 <i>(Some portion of Paragraph 2 must be present for credit.)</i>	5			
20	6 columns of data shown and no more	5			
21	Detail data sorted by Salary in descending order	10			
22	Everything in the table shown centered in its respective cell	5			
23	Column headings matching key and order of key	5			
24	Column headings shown in black, bold type, and all detail data in plain, black type	5			
25	5 rows of detail data shown	5			
26	All numeric values shown as numbers with commas <i>(where appropriate)</i> and no decimals	5			
27	All YrsEmployed values matching key or equal 12/31/2019 minus StartDate with result divided by 365.25 and any decimals dropped	15			
28	All AnnualSaving values matching key or equal to Salary times .03	10			
29	Body of Document/Table Total	90			
30	❖ SUBTOTAL PRINTOUT	150			
31	SUBTRACT DEDUCTION Maximum	-40	-	-	-
32	<ul style="list-style-type: none"> ❖ Deduct 2 points for each typo or missing field in the printout, not otherwise graded. Header is subject to 2 typos if present & subject to 2 typos + 5 points for location if missing. ❖ Errors include misspelling, missed capitalization or punctuation, extra, double, or omitted words, values, or rows, words that run together, incorrectly divided words, incorrect, wrapped or truncated words or values, or other errors. ❖ Stop grading where the student stopped typing. (i.e. if a student has a correct sender's name, he gets credit for all paragraphs completed even if they are incomplete or missing, but typos are taken for the entire document.) 				
33	❖ TOTAL PRINTOUT	150			
34	GRADERS' INITIALS				

2020 UIL Computer Applications District Test - Score Sheet - Printout 2

II. DATABASE WITH REPORT		MAXIMUM			150
		PTS	GRD1	GRD2	GRD3
1	Format <i>(Grading for formatting, not correct data)</i>				
2	Printout in landscape orientation on 1 page	5			
3	All margins 1"	5			
4	Title left justified	5			
5	Header top aligned with title and right aligned on right margin	5			
6	5 columns of data and no more <i>(count column headings in group header)</i>	5			
7	All column headings matching key and in same order	5			
8	No <i>Summary for...</i> lines shown	10			
9	All detail and summary values shown as numbers with commas and no decimals	5			
10	Everything in report header and page header in bold, black type, and everything else in plain, black type	5			
11	Nothing shown truncated or wrapped	5			
12	Format Total	55			
13	Calculations/Formulas <i>(Grading for correct data, not formatting)</i>				
14	All detail values in Saving after 25 Years matching key or equal AnnualSaving times 25	10			
15	All detail values in Saving+Interest after 25 Years matching key <i>(if some don't match due to typo in AnnualSaving in Printout 1, full credit is given for all as if matching or check for correct formula)</i>	10			
16	4 formulas shown in report footer left aligned with title	5			
17	4 formulas stacked in same order as key	5			
18	1 formula shown with first part as =INT(<i>and ending with</i>)	5			
19	Formula shown within parentheses as ("12/31/2019"-D2)/365.25	10			
20	1 formula shown as =E2*0.03 with multiplicands in either order	10			
21	*1 formula shown as [AnnualSaving]*25 with multiplicands in either order	10			
22	*1 formula shown as Abs(<i>and ending with</i>)	5			
23	*Formula shown within parentheses as FV(0.03,25,[AnnualSaving])	10			
24	6 rows of data shown right aligned with the Page field of the page footer matching key <i>(Take typos for any differences from key, even extra spaces, etc.)</i>	10			
25	Records in the 6 rows shown in same order as key	5			
26	Calculations/Formulas Total	95			
27	◇ SUBTOTAL PRINTOUT	150			
28	SUBTRACT DEDUCTION Maximum	-20	-	-	-
29	◇ Deduct 2 points for each typo in the printout. Header is subject to 2 typos, if present, and subject to 2 typos plus 5 points for location, if missing. Shading and borders are ignored in grading. * Formulas may or may not have table names preceding field names; if present, table names need brackets and ! or . following. ◇ Errors include misspelling, missed capitalization or punctuation, extra, double or omitted words, values or rows, words that run together, incorrectly divided words, incorrectly wrapped or truncated words or values or other errors.				
30	◇ TOTAL PRINTOUT	150			
31	GRADERS' INITIALS				

2020 UIL Computer Applications District Test - Score Sheet

FINAL SCORE

❖ TOTAL PRINTOUT 1	150			
❖ TOTAL PRINTOUT 2	150			
❖ TOTAL SCORE	300			
GRADERS' INITIALS				

Design View of Access Report

Report Header					
Potential Savings after 25 Years					(99999)-Dist-2
Page Header					
LastName	Salary	AnnualSaving	Saving after 25 Years	Saving+Interest after 25 Years	
Detail					
LastName	Salary	AnnualSaving	Saving after 25 Years	Saving+Interest after 25 Years	
Page Footer					
=Now()			="Page " & [Page] & " of " & [Pages]		
Report Footer					
=INT(("12/31/2019"-D2)/365.25)				FirstName,LastName,StartDate,Salary,YrsEmployed,AnnualSaving	
=E2*0.03				Ben,Thair,11/1/2009,48000	
[AnnualSaving]*25				Jim,Locher,1/3/2008,45500	
Abs(FV(0.03,25,[AnnualSaving]))				Justin,Inche,2/12/2014,32000	
				Mick,Stupp,7/14/2013,31500	
				Wanda,Rinn,9/12/2018,28000	

November 18, 2019

Hedda Verheles
Sew It Seams
1224 Orbital Way
Clear Lake, TX 78520

Dear Ms. Verheles:

EMPLOYEES' SAVINGS PLAN

Here is our report on the proposed savings plan for your employees. If your company had instituted a savings plan as suggested, their contributions would be as shown.

FirstName	LastName	StartDate	Salary	YrsEmployed	AnnualSaving
Ben	Thair	11/1/2009	48,000	10	1,440
Jim	Locher	1/3/2008	45,500	11	1,365
Justin	Inche	2/12/2014	32,000	5	960
Mick	Stupp	7/14/2013	31,500	6	945
Wanda	Rinn	9/12/2018	28,000	1	840

The attached dictates how much each person will put in our savings plan for 25 years and how much he or she will realize after that period, including the 3% interest compounded.

Sincerely yours,

Celia Fate

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Enclosure

Potential Savings after 25 Years

(99999)-Dist-2

LastName	Salary	AnnualSaving	Saving after 25 Years	Saving+Interest after 25 Years
Thair	48,000	1,440	36,000	52,501
Locher	45,500	1,365	34,125	49,767
Inche	32,000	960	24,000	35,001
Stupp	31,500	945	23,625	34,454
Rinn	28,000	840	21,000	30,626

=INT(("12/31/2019"-D2)/365.25)
 =E2*0.03
 [AnnualSaving]*25
 Abs(FV(0.03,25,[AnnualSaving]))

FirstName,LastName,StartDate,Salary,YrsEmployed,AnnualSaving
 Ben,Thair,11/1/2009,48000
 Jim,Locher,1/3/2008,45500
 Justin,Inche,2/12/2014,32000
 Mick,Stupp,7/14/2013,31500
 Wanda,Rinn,9/12/2018,28000

2020 UIL Computer Applications District Test - Tiebreaker - Score Sheet

GENERAL INSTRUCTIONS: All contestants take the tiebreaker component of the test, but it is only to be scored if a tie occurs in the top six places.

I. CALCULATE GROSS WORDS PER MINUTE:

- A. Circle all errors on the tied contestants' papers.
- B. Determine the gross words per minute.
 1. Find the number of words typed to the right of the last complete line typed by contestant.
 2. Add the number of words in the last line if it is incomplete to the tally.
 3. Divide the number by five to get the gross words per minute.
 4. For example, if a contestant typed twenty lines plus seven words on the next line, add the number out to the right of the completed line plus seven.
 5. Divide by five to get gross words per minute.

II. DETERMINE THE GROSS WORDS PER MINUTE

III. DEDUCT ONE POINT FOR EACH ERROR

IV. ✓ TOTAL - GROSS WPM TYPED LESS ERRORS

V. ADD FIVE BONUS POINT FOR EACH SUCCESS

FORMAT	Top margin 1 ½"			
	Left margin 1 ½"			
	Right margin 1"			
	Left margin greater than right margin			
	Bottom margin 1" to 1 ½"			
TITLE	Title in boldface type			
	Title centered			
	3 blank lines between title and body			
BODY	Body of report double spaced			
	Paragraphs indented ½"			
¶ 2	Grave accent on 'a' in <i>franc à cheval</i>			
¶ 3	Grave accent on 'a' in <i>franc à cheval</i>			
	Grave accent on 'a' in <i>franc à pied</i>			
	Acute accent on 'e' in Étienne			
Credit for Page 2 only if Page 2 is present:				
PAGE 2	No single line paragraph ending Page 1			
	No single line paragraph beginning Page 2			
	Top margin 1" on Page 2			
	Page number 1" from top and right edge of paper			
	Text double-spaced down from page number			
✓ TOTAL - BONUS POINTS				
✓ GRAND TOTAL-WPM PLUS BONUS POINTS				
GRADERS' INITIALS				

THE FRENCH FRANC

The French franc (FF), was a currency of the country of France. During the years	18
1360 through 1641, it was the name of coins that were worth one <i>livre tournois</i> . It was	35
reinstated in decimal form in 1795. After two centuries of inflation, it was revalued in 1960,	51
with each new franc (NF) being worth 100 old francs. The NF designation was continued	66
for a few years until the introduction of the Euro currency in 1999 (for accounting purposes)	82
and 2002 (for coins and banknotes).	88
The very first franc was a gold coin introduced in 1360 to pay the ransom of King	105
John II of France. The coin design showed him on a lavishly decorated horse, earning it	121
the name <i>franc à cheval</i> , meaning "free on horse" in French. The obverse side, like other	137
French coins give the king's title as <i>Francorum Rex</i> , "King of the Franks" in Latin. Its	153
value was set as one <i>livre tournois</i> (a money of account). John II, however, did not have	170
the necessary gold to make enough francs to pay his ransom, and he voluntarily returned	185
to English captivity.	188
John II died as a prisoner in England and his son, Charles V, was left to pick up the	207
pieces. Charles V pursued a policy of reform, including stable coinage. An edict dated	221
April 20, 1365, established the centerpiece of this policy, a gold coin officially called the	236
<i>denier d'or aux fleurs de lis</i> , which had a standing figure of the king on its obverse,	254
pictured under a canopy. Its value in money of account was one <i>livre tournois</i> , just like	270
the <i>franc à cheval</i> , and this coin is universally known as a <i>franc à pied</i> . In accordance	288

with the theories of the mathematician, economist and royal advisor Nicolas Oresme,	300
Charles struck fewer coins of better gold than his ancestors. In the accompanying	313
deflation, both prices and wages fell, but wages fell faster, and debtors had to settle in	329
better money than they had borrowed. The Mayor of Paris, Étienne Marcel, exploited	342
their discontent to lead a revolt which forced Charles V out of the city. The franc fared	359
better. It became associated with money constant at one <i>livre tournois</i> .	370