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.

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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
      - incorrect 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.

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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 contestant's 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 the contestant.
      2. Add the number of words in the last line if it is incomplete to the tally.
      3. Add the number of words in the footnote if present.
      4. Divide the number by five to get the gross words per minute.
      5. 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. Divide by five to get gross words per minute.
   C. Determine the gross words per minute.

II. DEDUCT ONE POINT FOR EACH ERROR
   (Typographical error, omitted word, incorrect number, etc.)

✓ TOTAL - GROSS WPM TYPED LESS ERRORS

III. ADD FIVE BONUS POINT FOR EACH SUCCESS

<table>
<thead>
<tr>
<th>FORMAT</th>
<th>Top margin 1 ½&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Left margin 1&quot;</td>
</tr>
<tr>
<td></td>
<td>Right margin 1&quot;</td>
</tr>
<tr>
<td></td>
<td>Bottom margin at least 1 - 1 ½&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TITLE</th>
<th>Title in boldface type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Title centered</td>
</tr>
<tr>
<td></td>
<td>3 blank lines between title and body</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BODY</th>
<th>Body of report single spaced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Paragraphs not indented</td>
</tr>
<tr>
<td></td>
<td>Double spaced between paragraphs</td>
</tr>
</tbody>
</table>

✓ Add 5 points for each £ mark max 15

✓ GRAND TOTAL-WPM PLUS BONUS POINTS

GRADERS' INITIALS
SHANTOU

Shantou (also Swatow), a port of China in the province of Kwang-tung, opened to foreign trade in 1869. The town is situated at the mouth of the main branch of the river Han, which 30 miles inland, flows past the great city of Ch’aochow Fu, or Tai-chu, while the surrounding country is more populous and full of towns and villages than any other part of the province. The climate is good, but being situated at the southern end of the Formosa Strait, the town is exposed to the full force of seasonal typhoons, and much destruction is occasionally wrought. English merchants settled on Double Island in the river as early as 1856.

The trade of the port has rapidly increased. In 1869, the total value of the trade was £4,800,000; in 1884, £5,519,772; and in 1904, £7,063,579. The surrounding country is a great sugarcane district producing annually about 2,400,000 cwt. of sugar, and there is an extensive refinery in the town employing upwards of 600 workmen and possessing a reservoir for 7,000,000 gallons of water. Among the leading exports are tea, grass-cloth, pineapple cloth manufactured in the villages about Chieh-Yang, oranges for which the district is famous, cheap fans and pewter, iron and tin wares.

Shantou is also a great emigration port and was the scene of many kidnapping adventures on the part of foreigners in the early days. Their outrages gave rise to hostile feelings towards foreigners, who were not allowed to enter the city of Ch’aochow Fu until the year 1861. About 1865, the whole Shantou district was still divided into a number of independent townships, each ruled by its own headmen, and the population was described in the official gazetteer, as generally rebellious and wicked in the highest degree.” Mr. Forrest, the British consular agent, relates that in that year he was witness to the preparations for a fight between the people living on the opposite sides of the estuary, which was only prevented by a British war vessel. The Taip’ings swept over the country and, by their ravages and plundering, did much to tame the independence of the clans. The punishment inflicted in 1869 by Commander Jones on the inhabitants of Ou-ting-pei, about 8 m. from Shantou, for the attack they had made on the boats of H.M.S. Cockchafer, showed the Chinese authorities that such piratical villages were not so strong as had been supposed. General Fang, a native of Ch’aochow Fu, was sent to reduce the district to order, and he carried out his instructions with remorseless rigor.
Computer Applications Invitational Test S18B

General test instructions: Follow instruction to create printouts for this contest. When time is called, completed printouts will be graded. Calibri in 12 point font was used for the document key, but this is not a requirement, and a smaller type is sometimes easier to fit to a page. Access default font size is acceptable for the report. For Access, when Text is specified for the Data Type, it should be Short Text in Office 2013/2016.

I. DATABASE WITH REPORT

A. Create a database named S18B.

B. In design view, create a table named Inventory with field specifications on the right and with no Primary Key.

C. Populate the table with data below and save.

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
<th>Inventory</th>
<th>Purchased</th>
<th>Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widget</td>
<td>6.63</td>
<td>688</td>
<td>200</td>
<td>583</td>
</tr>
<tr>
<td>Fidget Spinner</td>
<td>11.83</td>
<td>876</td>
<td>400</td>
<td>763</td>
</tr>
<tr>
<td>Tangle Toy</td>
<td>4.83</td>
<td>1,154</td>
<td>1,000</td>
<td>1,438</td>
</tr>
<tr>
<td>Rubiks Cube</td>
<td>10.92</td>
<td>4,862</td>
<td>2,000</td>
<td>5,283</td>
</tr>
<tr>
<td>Stress Ball</td>
<td>0.89</td>
<td>8,700</td>
<td>14,000</td>
<td>16,280</td>
</tr>
</tbody>
</table>

D. Create an update query in design view to update the following fields.

1. Update Price by multiplying the Cost field times 2.12.
2. Update Item Number by concatenating the following.
   a. Use a Left function to select the left 3 characters of the Description field.
   b. Use a Right function to select the right 2 digits of the Cost field.
   c. Use a Hex function with Cost field as the parameter.
3. Update Ending Inventory by adding Inventory and Purchased fields and subtracting the Sold field.
4. Update the Total Sales field by multiplying Sold times Price.

E. Save the query as UpdQry and run it until all fields are updated.

F. Create a report using the report wizard with all margins as 1" and with the following specifications.

1. Use all fields from the Inventory table and group by Cost using grouping interval as 10s.
2. Sort by Inventory in descending order.
3. Calculate the sum of Inventory, Sold, Ending Inventory and Total Sales.
4. Use stepped layout and landscape orientation and use the following title: Inventory
5. In design view make the following changes.
6. Add the following header top aligned with the title and right-aligned on the right-hand margin
   with 999999 with your contestant number: (999999)-S18B-1
7. Delete the Summary for... line.
8. Add a bold (2 pt) black line at the top of the group footer area spanning from margin to margin and move the summary values near the line.
9. Be certain nothing is truncated, wrapped, or overlapping.
10. Make column heading and detail data for Item Number the same width and vertically centered.
11. Everything in Cost by 10s and Description should be left aligned and all other column headings, detail values and summary values should be vertically right aligned.
12. Make everything black type and make report header, page header and report footer bold.

G. Save your report and print it on one page. with the following appearance. (Note that values may be incorrect, colons represent missing data, and shading and border are ignored unless specifically instructed.)

<table>
<thead>
<tr>
<th>Cost by 10s</th>
<th>Inventory Description</th>
<th>Cost</th>
<th>Purchased</th>
<th>Sold</th>
<th>Price</th>
<th>Item Number</th>
<th>Ending Inventory</th>
<th>Total Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>8,700 Stress Ball</td>
<td>0.89</td>
<td>14,000</td>
<td>16,280</td>
<td>1.89</td>
<td>Str898</td>
<td>6,420</td>
<td>30,717.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>5,738</td>
<td>6,046</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,092</td>
</tr>
<tr>
<td>Grand Total</td>
<td>17,787</td>
<td>42,737</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8,522</td>
</tr>
</tbody>
</table>
II. DOCUMENT WITH MERGED DATA

A. Create a modified block letter with indented paragraphs, mixed punctuation, and the following specifications:
   1. Use today's date.
   2. Inside address: Mr. Cody Pendent, Gadget Supply, 7416 West Dr., Benton, MA 02345
   3. Use the salutation: Dear Mr. Pendent
   4. Use the subject line in all caps: INVENTORY
   5. Use the following header right justified on the right margin and ½" from the top of the page, replacing 99999 with your contestant number: (99999)-S18B-2
   6. Use the following paragraphs for the body.

Sales for the year have already surpassed last year. Below is a list of the products and their total sales for your review.

- Set a left tab at .5" and set a right tab at 2.75", and merge Description field at the first tab and the Total Sales field at the second tab. Insert a NEXT RECORD indicator.
- Hit Alt F9 to view the MERGEFIELD format and use the following format switch for the Total Sales: \# "$ .00
- Click Alt F9 to exit MERGEFIELD format.
- Copy and replicate this line 4 times on the next 4 lines with 1 blank line above and below the 5 rows.
- Select records & create 2 columns with data in both columns & ½" between and a line between columns.

We should probably try to increase sales on the large ticket items for next year, and we request that you format merged numeric values as shown in the attached document. We used the following format switch and formulas in working with the data.

Price: [Insert formula from the UpdQry in Part I.]
Item Number: [Insert formula from the UpdQry in Part I.]
Ending Inventory: [Insert formula from the UpdQry in Part I.]
Total Sales: [Insert formula from the UpdQry in Part I.]
Format Switch: [Copy & paste data between brackets for MERGECODE field for Total Sales with format switch.]

7. Indent each line with a formula or switch ½".
8. Complimentary close is Sincerely
9. Use the following sender's name and title on one line with comma between Nick L. Endime, District Sales.
10. Use the reference initials as ul, and use the following enclosure notation: Enclosure

B. Save the document as a file called S18B-2.
C. Finish and merge to a new document and save as S18B-2-Merged and print the document in portrait orientation on one page with merged data showing.
D. Your columnar data should have the following appearance. (Values are incorrect; colons represent missing rows.)

<table>
<thead>
<tr>
<th>Widget</th>
<th>$ 8,888.88</th>
<th>Rubiks Cube</th>
<th>$ 222,222.22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangle Toy</td>
<td>$ 11,111.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Computer Applications Invitational Test S18B - Score Sheet - Printout 1

## DATABASE REPORT

<table>
<thead>
<tr>
<th></th>
<th>MAXIMUM</th>
<th>PTS</th>
<th>GRD1</th>
<th>GRD2</th>
<th>GRD3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>125</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Format</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Grading for formatting, not correct data)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Printout in landscape orientation on 1 page</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>All margins 1&quot;</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Header top aligned with title and right aligned on right margin</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>10 columns of data and no more (count column headings)</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Everything in report header, page header and report footer shown in black, boldface type, and everything else in plain, black type</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Column heading and detail data for Item Number shown centered</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Everything in Cost by 10s and Description shown left aligned and all other column headings, detail values &amp; summary values shown vertically right aligned</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Heavy, bold line spanning from left to right margins above group summary values</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Group summary values shown slightly below line</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>All detail and summary values for Inventory, Purchased, Sold, and Ending Inventory shown as numbers with commas and no decimals or $ signs</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>No Summary for... line shown</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Nothing truncated, wrapped or overlapping</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Format Total</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Grouping/Sorting/Calculations

<table>
<thead>
<tr>
<th></th>
<th>MAXIMUM</th>
<th>PTS</th>
<th>GRD1</th>
<th>GRD2</th>
<th>GRD3</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td></td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Grouping shown by Cost</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Grouping shown as Cost by 10s</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Only 2 groups shown with correct records in each group by Cost</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Records sorted in descending order by Inventory</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>All values in Price matching key or equal Cost x 2.12</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>First 5 characters of all Item Number detail matching key or with first 3 characters matching first 3 characters of Description and next 2 characters matching right 2 digits of Cost field</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Last digit of Item Number matching key or view thumb drive to check last digit in Item Number and verify that it was determined by using Hex function</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>All values in Ending Inventory matching key or equal to Inventory plus Purchased minus Sold</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>All values in Total Sales matching key or equal to Sold x Price</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>All group summary values matching key or equal to sum of the detail</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>All grand total values matching key or equal to sum of group summary values</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Grouping/Sorting/Calculations Total</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBTOTAL PRINTOUT**: 125

**GROUPING/SORTING/CALCULATIONS**: 55

**GRADERS' INITIALS**

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## II. DOCUMENT WITH MERGED DATA

<table>
<thead>
<tr>
<th>Format</th>
<th>MAXIMUM</th>
<th>175</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Printout in portrait orientation on 1 page</td>
<td>PTS</td>
<td>GRD1</td>
</tr>
<tr>
<td>2 Top margin 2&quot; and 1&quot; left and right and at least 1&quot; bottom margin</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3 Header shown ½&quot; from top of page and right aligned on right margin</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4 Today’s date, complimentary close and sender’s name keyed starting at center of page</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5 3 blank lines between date and inside address and 1 blank line between inside address and salutation and between salutation and subject and between subject and first paragraph</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6 Salutation matching key with colon following</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7 Subject shown indented and in all caps</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>8 One blank line between format switch or last paragraph and complimentary close and 3 blank lines between complimentary close and sender’s name</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>9 Complimentary close matching key and followed by a comma</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>10 Sender’s name and title shown on one line with comma between</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>11 One blank line between sender’s name and/or title and reference initials and between reference initials and enclosure notation</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>12 All paragraphs shown indented</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>13 All Description fields shown indented 1/2&quot;</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>14 All Total Sales values right aligned approximately matching key</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>15 All Description and Total Sales values matching key or records from Printout I</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>16 All format of Total Sales shown with $ followed by space and with commas and 2 decimals</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>17 Price formula matching key with multipliers in either order</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>18 First part of Item Number formula shown as Left([Description],3) &amp; Right([Cost],2)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>19 Last part of Item Number formula shown as &amp; Hex([Cost])</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>20 Ending Inventory formula matching key with addends in either order followed by subtraction</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>21 Total Sales formula matching key with multipliers in either order</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>22 Format Switch matching key exactly</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>23 Body/Merged Data/Formulas Total</td>
<td>110</td>
<td></td>
</tr>
</tbody>
</table>

### Format Total 65

<table>
<thead>
<tr>
<th>Body/Merged Data/Formulas</th>
<th>MAXIMUM</th>
<th>175</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Add 5 points for each completed paragraph</td>
<td>max</td>
<td>10</td>
</tr>
<tr>
<td>17 5 lines of merged data shown with Description and Total Sales fields between paragraphs</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>18 Merged data shown in 2 columns with data in each column and at least 1/2&quot; between</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>19 Vertical line shown between columns</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>20 All Description fields shown indented 1/2&quot;</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>21 All Total Sales values right aligned approximately matching key</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>22 All Description and Total Sales values matching key or records from Printout I</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>23 All format of Total Sales shown with $ followed by space and with commas and 2 decimals</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>24 Price formula matching key with multipliers in either order</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>25 First part of Item Number formula shown as Left([Description],3) &amp; Right([Cost],2)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>26 Last part of Item Number formula shown as &amp; Hex([Cost])</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>27 *Ending Inventory formula matching key with addends in either order followed by subtraction</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>28 *Total Sales formula matching key with multipliers in either order</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>29 Format Switch matching key exactly</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>30 Body/Merged Data/Formulas Total</td>
<td>110</td>
<td></td>
</tr>
</tbody>
</table>

### SUBTOTAL PRINTOUT 175

**SUBTRACT DEDUCTION**

| Maximum | -40 | - | - | - |

**Deduct 2 points for each typo or missing field in the printout, not otherwise graded. Header is subject to 2 typos.**

*Table names may or may not be present; if present they must be within square brackets followed by ! or .

**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 or title, he gets credit for all paragraphs completed even if they are incomplete or missing, but typos are taken for the entire document.)

### TOTAL PRINTOUT 175

**GRADERS’ INITIALS**

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### Contestant Number

Computer Applications Invitational Test S18B - Score Sheet

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**FINAL SCORE**

| TOTAL PRINTOUT 1 | 125 |
| TOTAL PRINTOUT 2 | 175 |
| TOTAL SCORE | 300 |

**GRADERS' INITIALS**

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**Design View of Access Report**

```plaintext
Report Header

Inventory

Page Header

Cost by 10s | Inventory | Description | Cost | Purchased | Sold | Price | Item Number | Ending Inventory | Total Sales |
---|---|---|---|---|---|---|---|---|---|

Cost Header

=INT([Cost])

Detail

Detail | Inventory | Description | Cost | Purchased | Sold | Price | Item Number | Ending Inventory | Total Sales |
---|---|---|---|---|---|---|---|---|---|

Cost Footer

=SUM([Description])

Page Footer

=NOW()

Report Footer

Grand Total | =SUM([Inventory]) | =SUM([Sold]) | =SUM([Total Sales])
---|---|---|
```

---

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### Inventory

<table>
<thead>
<tr>
<th>Cost by 10s</th>
<th>Inventory Description</th>
<th>Cost</th>
<th>Purchased</th>
<th>Sold</th>
<th>Price</th>
<th>Item Number</th>
<th>Ending Inventory</th>
<th>Total Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10</td>
<td>8,700 Stress Ball</td>
<td>0.89</td>
<td>14,000</td>
<td>16,280</td>
<td>1.89</td>
<td>Str891</td>
<td>6,420</td>
<td>30,717.10</td>
</tr>
<tr>
<td></td>
<td>1,154 Tangle Toy</td>
<td>4.83</td>
<td>1,000</td>
<td>1,438</td>
<td>10.24</td>
<td>Tan835</td>
<td>716</td>
<td>14,724.54</td>
</tr>
<tr>
<td></td>
<td>688 Widget</td>
<td>6.63</td>
<td>200</td>
<td>583</td>
<td>14.06</td>
<td>Wid637</td>
<td>305</td>
<td>8,194.41</td>
</tr>
</tbody>
</table>

| Sum         | 10,542                | 18,301|          |       |       |             | 7,441           | 53,636.06   |

| 10 - 20     | 4,862 Rubiks Cube     | 10.92 | 2,000    | 5,283 | 23.15 | Rub92B     | 1,579           | 122,303.56  |
|             | 876 Fidget Spinner    | 11.83 | 400      | 763   | 25.08 | Fid83C     | 513             | 19,135.73   |

| Sum         | 5,738                | 6,046 |          |       |       |             | 2,092           | 141,439.30  |

| Grand Total | 16,280               | 24,347|          |       |       |             | 9,533           | 195,075.36  |

Friday, December 8, 2017
Mr. Cody Pendent
Gadget Supply
7416 West Dr.
Benton, MA 02345

Dear Mr. Pendent:

INVENTORY

Sales for the year have already surpassed last year. Below is a list of the products and their total sales for your review.

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widget</td>
<td>$ 8,194.41</td>
</tr>
<tr>
<td>Fidget Spinner</td>
<td>$ 19,135.73</td>
</tr>
<tr>
<td>Tangle Toy</td>
<td>$ 14,724.54</td>
</tr>
<tr>
<td>Rubiks Cube</td>
<td>$ 122,303.56</td>
</tr>
<tr>
<td>Stress Ball</td>
<td>$ 30,717.10</td>
</tr>
</tbody>
</table>

We should probably try to increase sales on the large ticket items for next year, and we request that you format merged numeric values shown in the attached in the merged data. We used the following format switch and formulas in working with the data.

Price: [Cost]*2.12
Item Number: Left([Description],3) & Right([Cost],2) & Hex([Cost])
Ending Inventory: [Inventory]+[Purchased]-[Sold]
Total Sales: [Sold]*[Price]
Format Switch: MERGEFIELD Total_Sales \# "$ ,#.00

Sincerely,

Nick L. Endime, District Sales

Enclosure
Computer Applications Invitational Test S18B - Tiebreaker

GENERAL TIEBREAKER TEST INSTRUCTIONS: The tiebreaker is a five-minute timed typing test. 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. Copying a document and printing

   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: SHANTOU

   B. Save document as Tb-S18B.

   C. Write your contestant number and Tb-S18B in the upper right hand corner of your printout.

II. STOP when time is called and print your document when instructed to do so.
Shantou (also Swatow), a port of China in the province of Kwang-tung, opened to foreign trade in 1869. The town is situated at the mouth of the main branch of the river Han, which 30 miles inland, flows past the great city of Ch'aochow Fu, or Tai-chu, while the surrounding country is more populous and full of towns and villages than any other part of the province. The climate is good, but being situated at the southern end of the Formosa Strait, the town is exposed to the full force of seasonal typhoons, and much destruction is occasionally wrought. English merchants settled on Double Island in the river as early as 1856.

The trade of the port has rapidly increased. In 1869, the total value of the trade was £4,800,000; in 1884, £5,519,772; and in 1904, £7,063,579. The surrounding country is a great sugarcane district producing annually about 2,400,000 cwt. of sugar, and there is an extensive refinery in the town employing upwards of 600 workmen and possessing a reservoir for 7,000,000 gallons of water. Among the leading exports are tea, grass-cloth, pineapple cloth manufactured in the villages about Chieh-Yang, oranges for which the district is famous, cheap fans and pewter, iron and tin wares.

Shantou is also a great emigration port and was the scene of many kidnapping adventures on the part of foreigners in the early days. Their outrages gave rise to hostile feelings towards foreigners, who were not allowed to enter the city of Ch'aochow Fu until the year 1861. About 1865, the whole Shantou district was still divided into a number of independent townships, each ruled by its own headmen, and the population was described in the official gazetteer, as "generally rebellious and wicked in the highest degree." Mr. Forrest, the British consular agent, relates that in that year he was witness to the preparations for a fight between the people living on the opposite sides of the estuary, which was only prevented by a British war vessel. The Taip'ings swept over the country and, by their ravages and plundering, did much to tame the independence of the clans. The punishment inflicted in 1869 by Commander Jones on the inhabitants of Ou-ting-pei, about 8 m. from Shantou, for the attack they had made on the boats of H.M.S. Cockchafer, showed the Chinese authorities that such piratical villages were not so strong as had been supposed. General Fang, a native of Ch'aochow Fu, was sent to reduce the district to order, and he carried out his instructions with remorseless rigor.