

UNIVERSITY INTERSCHOLASTIC LEAGUE



Computer Applications

INVITATIONAL A

2023

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

2023 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, but Access default font size is acceptable for database reports.

I. SPREADSHEET

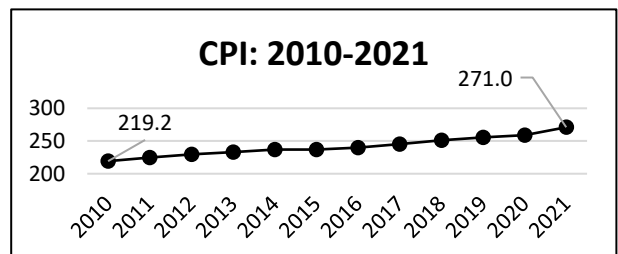
- A. Create a spreadsheet with the following information.
- B. Cells C3 and D3 are empty.
- C. In Cell C4, subtract Cell B3 from Cell B4.
- D. In Cell D4, divide Cell C4 by Cell B3.
- E. Select Cells C4 and D4 and fill down thru Cells C14 and D14.
- F. In Cell B15, calculate average of Cells B3 thru B14; in Cell C15, calculate average of Cell C4 thru C14; in Cell D15, calculate average of Cell D4 thru D14.
- G. Copy the formula in Cell C4 without the equal sign and paste into Cell C17; copy the formula from Cell D4 without the equal sign and paste into Cell D17.
- H. Create a printout in portrait orientation using Calibri 12-point font, 1" margins and the following specifications.
 1. Center the worksheet horizontally and vertically on the page.
 2. Insert the following header in the upper right-hand corner 1" from the top of the page and aligned on the right margin, replacing 99999 with your contestant number: (99999)-Inva-1
 3. Show gridlines and row and column indicators.
 4. Set the print area to be Cell A1 thru D17.
 5. Merge Cells A1 thru D1 and center data as shown.
 6. Make everything in Rows 1, 2, 15 and 17 boldface type.
 7. Wrap column headings as shown above.
 8. Center everything in Cells A2 thru D17 vertically and horizontally.
 9. All values in Columns B and C should be numbers with 1 decimal, and all values in Column D should be a percent with 1 decimal.
- I. Save the spreadsheet as a file called **Inva-1** and print it in portrait orientation on one page.

MAXIMUM 150

| | A | B | C | D |
|-----------|-----------------------------|------------|-----------------------|----------------------|
| 1 | Consumer Price Index | | | |
| 2 | Year | CPI | Point Increase | % of Increase |
| 3 | 2010 | 219.2 | | |
| 4 | 2011 | 224.9 | | |
| 5 | 2012 | 229.6 | | |
| 6 | 2013 | 233.0 | | |
| 7 | 2014 | 236.7 | | |
| 8 | 2015 | 237.0 | | |
| 9 | 2016 | 240.0 | | |
| 10 | 2017 | 245.1 | | |
| 11 | 2018 | 251.1 | | |
| 12 | 2019 | 255.7 | | |
| 13 | 2020 | 258.8 | | |
| 14 | 2021 | 271.0 | | |
| 15 | Averages: | | | |
| 16 | | | | |
| 17 | Formulas: | | | |

II. SPREADSHEET WITH CHART

- A. Select Cells B2 thru B14 insert a 2D line chart with markers and make the following changes.
 1. Right click in the chart and click on Select data in the pull-down menu.
 - a. Click on edit under the Horizontal (Category) Axis Labels heading.
 - b. Use your mouse to select Cells A3 thru A14 and click ok.
 2. Use the title as shown centered above chart in boldface type.
 3. Format the data series as a black line with solid black markers.
 4. Angle the years counterclockwise to be slanted in same direction as shown in chart.
 5. Click on the y-axis labels and set minimum to be 200, maximum to 300, and major interval to 50; format as numbers with no decimals.
 6. Do not show a legend.
 7. Use a black border around the chart area.



8. Click on plotted line to select markers and then click on leftmost marker and add a data label with **CPI** value; do the same for rightmost marker, and use leader lines as shown so values are readable.
 9. The chart should have appearance above.
 10. Copy chart to be pasted in document in **Part III**.
- B. Print the chart if you are running out of time to receive some credit for your work.

III. DOCUMENT WITH CHART

MAXIMUM 150

- A. Create a modified block business letter with mixed punctuation, Calibri 12-point font and the following specifications:
1. Use the following header right justified on the right-hand margin 1" from the top of the page, replacing 99999 with your contestant number: (99999)-InvA-2
 2. Use today's date.
 3. Use the following inside address: Mr. Noah Vail, Harris County Appraisal District, 112 Bennington St., Houston, TX 77002.
 4. Use the following salutation with appropriate punctuation: Dear Mr. Vail
 5. Use the following subject in all caps: TAX APPRAISAL
- B. Use the following paragraphs for the body, embedding the chart from **Part II** where indicated.

Below is a chart of the Consumer Price Index from 2010 to 2021. As you can see, the Index has steadily risen over this period. The average increase in most years has been about 2% with the maximum being 4.7%.

**[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 percentage increase for the CPI for the 2021 year was 4.7%, the highest for the 10-year period and nearly two and one-half times higher than the average for the period. Can you possibly explain why the increase in tax values of real estate has risen annually by nearly 18%?

- C. Use the following complimentary close with appropriate punctuation: Sincerely yours
- D. Use the following sender's name: Lotta Spenses
- E. Use the following reference initials: uil
- F. Save the document as a file called **InvA-2** and print in portrait orientation on one page.

2023 UIL Computer Applications Invitational Test A - Score Sheet - Printout 1

| I. SPREADSHEET PRINTOUT | | 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 | 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 | Gridlines and row and column indicators shown | 5 | | | |
| 8 | Print area shown as Cells A1 thru Cell D17 | 5 | | | |
| 9 | Cells A1 thru Cell D1 merged with title centered | 5 | | | |
| 10 | Column headings shown wrapped vertically and horizontally matching key | 10 | | | |
| 11 | Everything in Rows 1, 2, 15 and 17 shown in boldface type | 5 | | | |
| 12 | Cells A2 thru D17 shown centered in respective cells | 5 | | | |
| 13 | All values in Columns B and C should be numbers with 1 decimal, and all values in Column D should be a percent with 1 decimal | 5 | | | |
| 14 | Nothing shown truncated or wrapped except specified wrapped headings | 5 | | | |
| 15 | Format Total | 70 | | | |
| 16 | Calculations/Formulas <i>(Grading for correct data, not formatting)</i> | | | | |
| 17 | *All values in Cells C4 thru C14 matching key or equal to respective CPI value minus the previous year's CPI value | 20 | | | |
| 18 | *All values in Cells D4 thru D14 matching key or equal to respective Point Increase value divided by the previous year's CPI value | 20 | | | |
| 19 | *All values in Cells B15 thru D15 matching key or equal to average of the values in the respective columns (+ or - .1) | 20 | | | |
| 20 | Add 10 points for each formula in Cell C17 thru D17 matching key max | 20 | | | |
| 21 | Calculations/Formulas Total | 80 | | | |
| 22 | ♣ SUBTOTAL PRINTOUT | 150 | | | |
| 23 | SUBTRACT DEDUCTION Maximum | -40 | - | - | - |
| 24 | <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. *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. | | | | |
| 25 | ♣ TOTAL PRINTOUT | 150 | | | |
| 26 | GRADERS' INITIALS | | | | |

2023 UIL Computer Applications Invitational Test A - Score Sheet - Printout 2

| II. DOCUMENT WITH CHART | | 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 12-point Calibri 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 | Everything blocked on the left, not counting header or chart | 5 | | | |
| 6 | Today's date on the top margin | 5 | | | |
| 7 | 3 lines between date and inside address | 5 | | | |
| 8 | 1 blank line between inside address and salutation and between salutation and subject and between subject and 1 st paragraph | 5 | | | |
| 9 | Colon shown following salutation and comma following complimentary close | 10 | | | |
| 10 | Subject shown in all caps | 5 | | | |
| 11 | 1 blank line between last paragraph and complimentary close and 3 blank lines between close and sender's name | 5 | | | |
| 12 | 1 blank line between sender's name and reference initials | 5 | | | |
| 13 | Format Total | 60 | | | |
| 14 | Body of Document/Chart <i>(Grading for correct data, not formatting; chart must be from current test)</i> | | | | |
| 15 | Add 5 points for each completed paragraph max | 10 | | | |
| 16 | Single line with markers chart shown | 5 | | | |
| 17 | Single line chart shown centered between margins, indented at least 1/2" | 5 | | | |
| 18 | One blank line above and below chart | 5 | | | |
| 19 | No legend shown | 5 | | | |
| 20 | Data series shown as black line with black markers | 10 | | | |
| 21 | Data labels shown match key or match CPI data from Printout 1 | 10 | | | |
| 22 | Add 5 points for data labels on 1st and/or last plotted point max | 10 | | | |
| 23 | Title centered above chart in boldface type | 5 | | | |
| 24 | Y-axis scale matching values and number formatting on key | 10 | | | |
| 25 | X-axis labels matching key and slanted in same direction | 10 | | | |
| 26 | Black border shown around chart | 5 | | | |
| 27 | Body of Document/Chart Total | 90 | | | |
| 28 | ❖ SUBTOTAL PRINTOUT | 150 | | | |
| 29 | SUBTRACT DEDUCTION Maximum | -40 | - | - | - |
| 30 | <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 and subject to 2 typos plus 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.) | | | | |
| 31 | ❖TOTAL PRINTOUT | 150 | | | |
| 32 | GRADERS' INITIALS | | | | |

Contestant Number _____

2023 UIL Computer Applications Invitational Test A - Score Sheet

FINAL SCORE

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

| | A | B | C | D |
|----|-----------------------------|--------------|-----------------------|----------------------|
| 1 | Consumer Price Index | | | |
| 2 | Year | CPI | Point Increase | % of Increase |
| 3 | 2010 | 219.2 | | |
| 4 | 2011 | 224.9 | 5.7 | 2.6% |
| 5 | 2012 | 229.6 | 4.7 | 2.1% |
| 6 | 2013 | 233.0 | 3.4 | 1.5% |
| 7 | 2014 | 236.7 | 3.7 | 1.6% |
| 8 | 2015 | 237.0 | 0.3 | 0.1% |
| 9 | 2016 | 240.0 | 3.0 | 1.3% |
| 10 | 2017 | 245.1 | 5.1 | 2.1% |
| 11 | 2018 | 251.1 | 6.0 | 2.4% |
| 12 | 2019 | 255.7 | 4.6 | 1.8% |
| 13 | 2020 | 258.8 | 3.1 | 1.2% |
| 14 | 2021 | 271.0 | 12.2 | 4.7% |
| 15 | Averages: | 241.8 | 4.7 | 2.0% |
| 16 | | | | |
| 17 | Formulas: | | B4-B3 | C4/B3 |

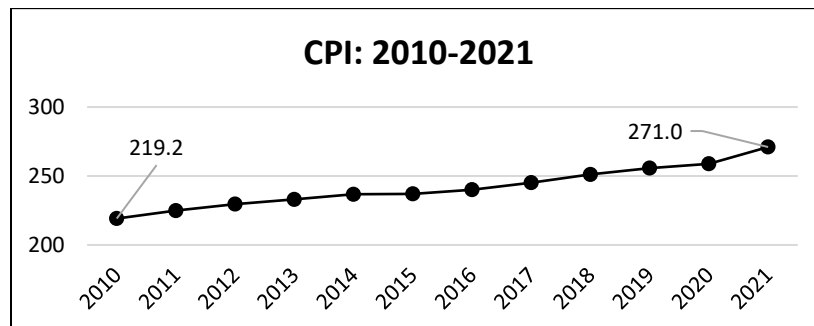
Today's Date

Mr. Noah Vail
Harris County Appraisal District
112 Bennington St.
Houston, TX 77002

Dear Mr. Vail:

TAX APPRAISAL

Below is a chart of the Consumer Price Index from 2010 to 2021. As you can see, the Index has steadily risen over this period. The average increase in most years has been about 2% with the maximum being 4.7%.



The percentage increase for the CPI for the 2021 year was 4.7%, the highest for the 10-year period and nearly two and one-half times higher than the average for the period. Can you possibly explain why the increase in tax values of real estate has risen annually by nearly 18%?

Sincerely yours,

Lotta Spenses

uil

2023 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 1½" | | | |
| | Right margin 1" | | | |
| | Bottom margin at least 1 - 1 ½" | | | |
| | 3 blank lines between title and body | | | |
| TITLE | Title in boldface type | | | |
| | Title centered | | | |
| BODY | Body of report double spaced | | | |
| | Paragraphs indented ½" | | | |
| ¶1 | Add 5 pts for each correct character in <i>φλέψ</i> max 20 | | | |
| ¶2 | Add 5 pts for each correct character in <i>σαφής</i> max 25 | | | |
| 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 | | | | |

PHLEBITIS

| | |
|---|-----|
| Phlebitis, (from Gr. <i>φλέψ</i> , a vein), is inflammation of a vein. | 16 |
| Inflamed, the blood in it is apt to form a clot, or thrombus, which, if loosened and | 33 |
| displaced from its original position, may be carried as an embolus towards the heart and | 48 |
| there be arrested. It may pass through the cavities of the heart into the lungs, there | 65 |
| to lodge and to give rise to alarming symptoms. If the thrombus is formed in the | 71 |
| inflamed vein of a pile, it may pass as an embolus into the liver. If an embolus is carried | 90 |
| through the left side of the heart, it may enter the large vessels at the root of the neck | 109 |
| and reach the brain, giving rise to serious cerebral disturbance or to a fatal paralysis. | 124 |
| The thrombus may be formed in gout and rheumatism or in consequence of stagnation | 138 |
| of the blood-current due to slowing of the circulation in various wasting diseases. | 152 |
| When a thrombus forms, absolute rest in the recumbent posture is to be | 165 |
| strictly enjoined; the great danger is the displacement of the clot. An inflamed and | 179 |
| clotted vein, if near the surface, causes an elongated, dusky elevation beneath the skin | 193 |
| where the vein may be felt as a hard cord, the size perhaps of a cedar pencil or a pen- | 213 |
| holder. It's course is marked by great tenderness, and the tissue, which was drained by | 228 |
| the branches of that vein, are livid from congestion and perhaps boggy and pitting | 242 |
| with edema. If, as often happens, the inflamed vein is one of those running | 256 |
| conspicuously upwards from the foot – a saphenous vein (<i>σαφής</i> , distinct) – the | 267 |

| | |
|---|-----|
| patient should be placed in bed with the limb secured on a splint in order to protect it | 285 |
| from any rough movement. | 289 |
| Should the clot become detached, it might give rise to sudden and alarming | 302 |
| faintness, possibly even to a fatal syncope. Thus, there is always grave risk with an | 317 |
| inflamed and clotted vein, and modern surgery shows that the safest course is, | 330 |
| when practicable, to lace a ligature on the vein upon the heart-side of the clotted piece | 346 |
| and to remove the latter by dissection. When, as sometimes happens, the clot is | 360 |
| invaded by diseased organisms, it is particularly liable to become disintegrated, and if | 373 |
| parts of it are carried to various regions of the body, they may there give rise to the | 391 |
| formation of secondary abscesses. In the ordinary treatment of phlebitis, in addition to | 404 |
| the insistence on perfect rest and quiet, fomentations may be applied locally, the limb | 418 |
| being kept raised. Massage must not be given so long as there is any risk of a clot being | 437 |
| detached. | 438 |