**Contestant Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Rank: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



**ADVANCED SPREADSHEET APPLICATIONS**

(235)

**REGIONAL 2022**

**Production:**

**Job 1: Worksheets with answers and formulas \_\_\_\_\_\_\_\_\_\_ (383 points)**

**Job 2: Formatted Worksheet \_\_\_\_\_\_\_\_\_\_ (170 points)**

**Job 3: 3-D Pie Chart \_\_\_\_\_\_\_\_\_\_ (65 points)**

**TOTAL POINTS \_\_\_\_\_\_\_\_\_\_ (618 points)**

**Test Time: 90 minutes**

**GENERAL GUIDELINES:**

*Failure to adhere to any of the following rules will result in disqualification:*

1. Member must hand in this test booklet and all printouts if any.
2. No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests (handwritten, photocopied, or keyed) are allowed in the testing area.
3. Electronic devices will be monitored according to ACT standards.
4. Put your Member ID and printout number in the right section of the footer on each printout unless instructed otherwise. Your name or initials should *not* appear on any work you submit.
5. If you finish before the end of the testing time, notify the proctor. Time may be a factor in determining the winner in the event of a tie.
6. When turning in your contest, the jobs should be arranged in printout order.

**SCENARIO:**

**You work for PBA Texas Hospital System in the accounting department. Today your manager asked you to create the spreadsheet for three cities in Texas to compare Radiology Medical Procedures completed and the amount of money collected from Insurance companies for these procedures. It covers the first 3 months of this year. The cities are Galveston, Dallas, and El Paso.**

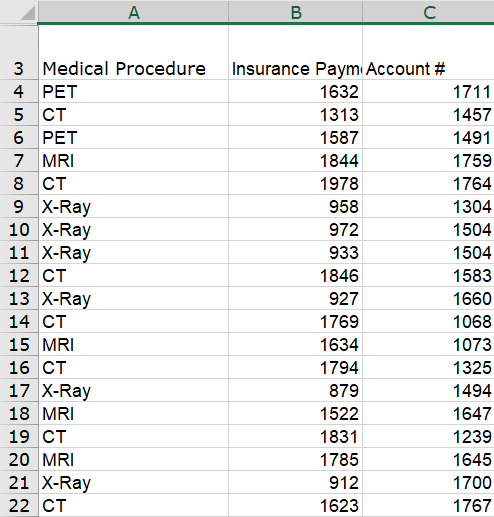
|  |  |  |
| --- | --- | --- |
| **Job 1 (Worksheets with answers and formulas)** | **Points Possible** | **Points Earned** |
| Member ID and Job # in right section of footer | 10 |  |
| Ariel Size 11 font used for data | 10 |  |
| Landscape orientation with narrow margins | 10 |  |
| Worksheet printed landscape on one page centered vertically and horizontally | 10 |  |
| Name the first worksheet Galveston | 5 |  |
| Typed in A1 PBA TEXAS Hospital System – Galveston | 5 |  |
| Typed in A2 “Insurance Reimbursements” | 5 |  |
| Information typed starting at A3 with Medical Procedures | 20 |  |
| Following information in stated cell locations   * A23: Total * E4: Medical Procedures * E5: MRI * E6: CT * E7: X-Ray * E8: PET * F4: Number of Procedures * G4: Insurance Payments * H4: Average Payment | 9 |  |
| Create a new worksheet and name it Dallas | 5 |  |
| Copy A1:C3 from Galveston worksheet to Dallas worksheet A1:C3 | 5 |  |
| The information was typed starting B4 | 20 |  |
| The following information was placed in the stated cell locations   * Cell A24: Total * Cell E4: Medical Procedures * Cell E5: MRI * Cell E6: CT * Cell E7: X-Ray * Cell E8: PET * Cell F4: Number of Procedures * Cell G4: Insurance Payments * Cell H4: Average Payment | 9 |  |
| Create a new worksheet and name it El Paso | 5 |  |
| Copy A1:C3 from Galveston worksheet to El Paso worksheet A1:C3 | 5 |  |
| The information was entered starting in B4 | 20 |  |
| The following information was placed in the stated cell locations   * A24: Total * E4: Medical Procedures * E5: MRI * E6: CT * E7: X-Ray * E8: PET * F4: Number of Procedures * G4: Insurance Payments * H4: Average Payment | 9 |  |
| In B23 of the Galveston Worksheet, place a function that calculates the total monies that the hospital system collected from insurance payments. | 5 |  |
| F5:F8, place a function that counts the number of MRI procedures completed | 10 |  |
| G5:G8 place a function that totals the number of insurance payments for MRI’s. | 10 |  |
| H5:H8, place a function that averages the amount of MRI insurance payments. | 10 |  |
| B24 of the Dallas Worksheet, place a function that calculates the total monies that the hospital system collected from insurance payments. | 5 |  |
| F5:F8, place a function that counts the number of MRI procedures completed. | 10 |  |
| G5:G8 place a function that totals the number of insurance payments for MRI’s. | 10 |  |
| H5:H8, place a function that averages the amount of MRI insurance payments. | 10 |  |
| B24 of the El Paso Worksheet, place a function that calculates the total monies that the hospital system collected from insurance payments. | 5 |  |
| F5:F8, place a function that counts the number of MRI procedures completed. | 10 |  |
| G5:G8 place a function that totals the number of insurance payments for MRI’s. | 10 |  |
| H5:H8, place a function that averages the amount of MRI insurance payments. | 10 |  |
| F4, place a function that references Galveston’s total for insurance payments. | 5 |  |
| Create a new worksheet and name it PBA Summary. | 5 |  |
| Move worksheet the worksheet so it is before Galveston. | 5 |  |
| Copy A1:C3 from Galveston worksheet to PBA Summary worksheet A1:C3 | 5 |  |
| Type the following information in the cells below   * D3: Percentage of Total * F3: Total * A7: MRI * A8: CT * A9: X-Ray * A10: PET | 6 |  |
| Copy A1:C3 from Galveston worksheet to PBA Summary worksheet A1:C3 | 5 |  |
| F5, place a function that references Dallas’ total for insurance payments. | 5 |  |
| F6, place a function that references El Paso’s total for insurance payments. | 5 |  |
| F7, place a function that calculates the total of insurance payments made for all three cities. | 5 |  |
| B7, place a function that references the Galveston, Dallas, and El Paso’s MRI’s performed and totals them together. | 5 |  |
| B8, place a function that references the Galveston, Dallas, and El Paso’s CT’s performed and totals them together. | 5 |  |
| B9, place a function that references the Galveston, Dallas, and El Paso’s X-Ray’s performed and totals them together. | 5 |  |
| B10, place a function that references the Galveston, Dallas, and El Paso’s PET’s performed and totals them together. | 5 |  |
| C7, place a function that references the Galveston, Dallas, and El Paso’s insurance payment totals for MRI’s. | 5 |  |
| C8, place a function that references the Galveston, Dallas, and El Paso’s insurance payment totals for CT’s. | 5 |  |
| C9, place a function that references the Galveston, Dallas, and El Paso’s insurance payment totals for X-Ray’s. | 5 |  |
| C10, place a function that references the Galveston, Dallas, and El Paso’s insurance payment totals for PET’s. | 5 |  |
| D7, place an absolute formula that calculates the Percentage of insurance payments made for MRI’s. | 5 |  |
| D8, place an absolute formula that calculates the Percentage of insurance payments made for CT’s. | 5 |  |
| D9, place an absolute formula that calculates the Percentage of insurance payments made for X‑Ray’s. | 5 |  |
| D10, place an absolute formula that calculates the Percentage of insurance payments made for PET’s. | 5 |  |
| Print a copy of the worksheet with gridlines and adjust column widths to **make all data visible**. | 5 |  |
| Print a copy of the worksheet with gridlines and with the **formulas showing**. | 5 |  |
| **Subtotal** | **383** |  |

|  |  |  |
| --- | --- | --- |
| **Job 2 (Formatted worksheet)** | **Points Possible** | **Points Earned** |
| Member ID and Job # in right section of footer | 10 |  |
| In the PGA Summary worksheet, the document theme should be Office. | 5 |  |
| Merge and center the title A1:H1. | 5 |  |
| Merge and center the subtitle A2:H2. | 5 |  |
| Format the company name to Title cell style. | 5 |  |
| Format the subtitle to Heading 1 cell style. | 5 |  |
| D7:D10 is percentage with 2 decimal places | 5 |  |
| Format F4:F6 as currency. | 5 |  |
| Format F7 to accounting and set with a Total Cell Style. | 5 |  |
| Group F4:F6 rows. | 5 |  |
| Move to Galveston worksheet. Merge and center the title A1:H1. | 5 |  |
| Merge and center the subtitle A2:H2. | 5 |  |
| Format the company name to Title cell style. | 5 |  |
| Format the subtitle to Heading 1 cell style. | 5 |  |
| Format B4:B23 as accounting with zero decimals places. | 5 |  |
| Format B23 with a Total cell style. | 5 |  |
| Format G4:G7 as accounting with zero decimal places. | 5 |  |
| Move to Dallas worksheet. Merge and center the title A1:H1. | 5 |  |
| Merge and center the subtitle A2:H2. | 5 |  |
| Format the company name to Title cell style. | 5 |  |
| Format the subtitle to Heading 1 cell style. | 5 |  |
| Format B4:B24 as accounting with zero decimals places. | 5 |  |
| Format B24 with a Total cell style. | 5 |  |
| Format G4:G7 as accounting with zero decimal places. | 5 |  |
| Move to El Paso worksheet. Merge and center the title A1:H1. | 5 |  |
| Merge and center the subtitle A2:H2. | 5 |  |
| Format the company name to Title cell style. | 5 |  |
| Format the subtitle to Heading 1 cell style. | 5 |  |
| Format B4:B24 as accounting with zero decimals places. | 5 |  |
| Format B24 with a Total cell style. | 5 |  |
| Format G4:G7 as accounting with zero decimal places. | 5 |  |
| Increase column width of all columns in all worksheets using auto fit. | 5 |  |
| Print out the formatted spreadsheet. | 5 |  |
| **Subtotal** | **170** |  |

|  |  |  |
| --- | --- | --- |
| **Job 3 (3-D Pie Chart)** | **Points Possible** | **Points Earned** |
| Member ID and Job # in right section of footer | 10 |  |
| Select the chart style 8 | 5 |  |
| Chart tab is named PBA Summary Chart | 5 |  |
| Chart is based on the procedures and the percentage of insurance payment cell locations | 10 |  |
| Quick Layout 1 | 5 |  |
| Make sure the title of the chart is “Percentage of Insurance Payments” | 5 |  |
| Title is Rockwell Extra Bold font size 16 | 10 |  |
| Change chart colors to “color 3”. | 5 |  |
| Make sure there is no legend showing | 5 |  |
| Print out the formatted chart on one full page in black and white | 5 |  |
| **Subtotal** | **65** |  |
| **TOTAL POINTS** | **638** |  |

**JOB 1: Create Spreadsheet with Formulas and functions**

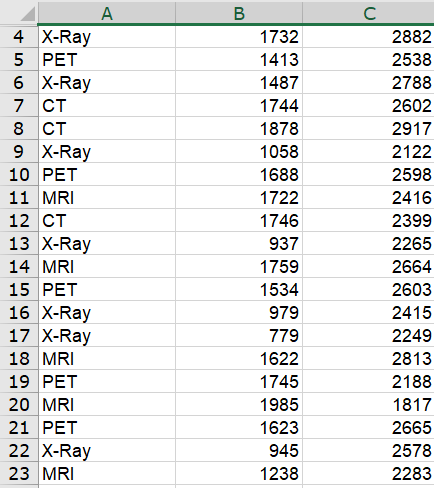
1. Set the global options to include the following modifications: Arial, 11pt, Landscape, Centered horizontally and vertically, Fit to One Page, and Narrow Margins.
2. Name the worksheet Galveston.
3. In A1 type PBA TEXAS Hospital System-Galveston and in A2 type Insurance Reimbursements.
4. Type the information from the image below:



1. Place the following information in the stated cell locations:

* A23: Total
* E3: Medical Procedures
* E4: MRI
* E5: CT
* E6: X-Ray
* E7: PET
* F3: Number of Procedures
* G3: Insurance Payments
* H3: Average Payment

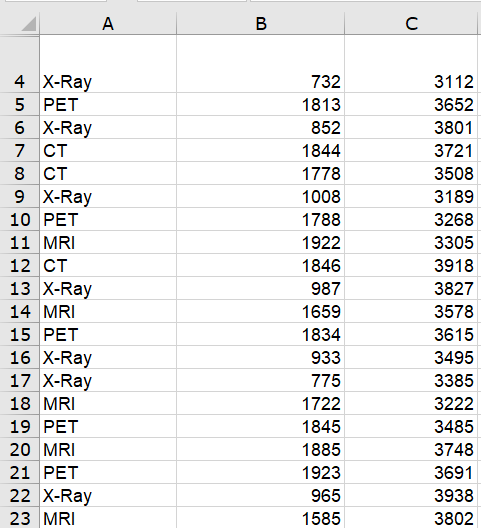
1. Create a new worksheet and name it Dallas.
2. Copy A1:C3 from Galveston worksheet to Dallas worksheet A1:C3 and in A1 change “Galveston” to “Dallas”.
3. Type the following information:



1. Place the following information in the stated cell locations:

* A24: Total
* E3: Medical Procedures
* E4: MRI
* E5: CT
* E6: X-Ray
* E7: PET
* F3: Number of Procedures
* G3: Insurance Payments
* H3: Average Payment

1. Create a new worksheet and name it El Paso.
2. Copy A1:C3 from Galveston worksheet to El Paso worksheet A1:C3 and in A1 change “Dallas” to “El Paso”.
3. Type the following information pictured below:



1. Place the following information in the following cell locations:

* A24: Total
* E3: Medical Procedures
* E4: MRI
* E5: CT
* E6: X-Ray
* E7: PET
* F3: Number of Procedures
* G3: Insurance Payments
* H3: Average Payment

1. Return to Galveston worksheet.
2. In B23, place a function that calculates the total monies that the hospital system collected from insurance payments.
3. In F4, place a function that counts the number of MRI procedures completed and fill this function down to F7.
4. In G4, place a function that totals the number of insurance payments for MRI’s and fill this function down to G7.
5. In H4, place a function that averages the amount of MRI insurance payments and fill this function down to H7.
6. Move to Dallas worksheet.
7. In B24, place a function that calculates the total monies that the hospital system collected from insurance payments.
8. In F4, place a function that counts the number of MRI procedures completed and fill this function down to F7.
9. In G4, place a function that totals the number of insurance payments for MRI’s and fill this function down to G7.
10. In H4, place a function that averages the amount of MRI insurance payments and fill this function down to H7.
11. Move to El Paso worksheet.
12. In B24, place a function that calculates the total monies that the hospital system collected from insurance payments.
13. In F4, place a function that counts the number of MRI procedures completed and fill this function down to F7.
14. In G4, place a function that totals the number of insurance payments for MRI’s and fill this function down to G7.
15. In H4, place a function that averages the amount of MRI insurance payments and fill this function down to H7.
16. Create a new worksheet and name it PBA Summary.
17. Move the worksheet so it is before Galveston.
18. Copy A1:C3 from Galveston worksheet to PBA Summary worksheet A1:C3
19. Type the following information in the cells below

* D3: Percentage of Total
* F3: Total
* A7: MRI
* A8: CT
* A9: X-Ray
* A10: PET

1. In F4, place a function that references Galveston’s total for insurance payments.
2. In F5, place a function that references Dallas’ total for insurance payments.
3. In F6, place a function that references El Paso’s total for insurance payments.
4. In F7, place a function that calculates the total of insurance payments made for all three cities.
5. In B7, place a function that references the Galveston, Dallas, and El Paso’s MRI’s performed and totals them together.
6. In B8, place a function that references the Galveston, Dallas, and El Paso’s CT’s performed and totals them together.
7. In B9, place a function that references the Galveston, Dallas, and El Paso’s X-Ray’s performed and totals them together.
8. In B10, place a function that references the Galveston, Dallas, and El Paso’s PET’s performed and totals them together.
9. In C7, place a function that references the Galveston, Dallas, and El Paso’s insurance payment totals for MRI’s.
10. In C8, place a function that references the Galveston, Dallas, and El Paso’s insurance payment totals for CT’s.
11. In C9, place a function that references the Galveston, Dallas, and El Paso’s insurance payment totals for X-Ray’s.
12. In C10, place a function that references the Galveston, Dallas, and El Paso’s insurance payment totals for PET’s.
13. In D7, place an absolute formula that calculates the Percentage of insurance payments made for MRI’s.
14. In D8, place an absolute formula that calculates the Percentage of insurance payments made for CT’s.
15. In D9, place an absolute formula that calculates the Percentage of insurance payments made for X‑Ray’s.
16. In D10, place an absolute formula that calculates the Percentage of insurance payments made for PET’s.
17. Print a copy of the worksheet with gridlines and adjust column widths to **make all data visible**.
18. Print a copy of the worksheet with gridlines, adjust column widths to make all data visible and **formulas showing**.

**JOB 2: Format the Spreadsheet you created in Job 1 using the following instructions:**

1. In the PBA Summary worksheet, the document theme should be Office.
2. Merge and center the title A1:H1.
3. Merge and center the subtitle A2:H2.
4. Format the company name to Title cell style.
5. Format the subtitle to Heading 1 cell style.
6. Format D7:D10 to percentage with 2 decimal places.
7. Format F4:F6 as currency.
8. Format F7 to accounting and set with a Total Cell Style.
9. Group F4:F6 rows.
10. Move to Galveston worksheet.
11. Merge and center the title A1 through H1.
12. Merge and center the subtitle A2 through H2.
13. Format the company name to Title cell style.
14. Format the subtitle to Heading 1 cell style.
15. Format B4:B23 as accounting with zero decimals places.
16. Format B23 with a Total cell style.
17. Format G4:G7 as accounting with zero decimal places.
18. Move to Dallas worksheet.
19. Merge and center the title A1 through H1.
20. Merge and center the subtitle A2 through H2.
21. Format the company name to Title cell style.
22. Format the subtitle to Heading 1 cell style.
23. Format B4:B24 as accounting with zero decimals places.
24. Format B24 with a Total cell style.
25. Format G4:G7 as accounting with zero decimal places.
26. Move to El Paso worksheet.
27. Merge and center the title A1 through H1.
28. Merge and center the subtitle A2 through H2.
29. Format the company name to Title cell style.
30. Format the subtitle to Heading 1 cell style.
31. Format B4:B24 as accounting with zero decimals places.
32. Format B24 with a Total cell style.
33. Format G4:G7 as accounting with zero decimal places.
34. Increase column width of all columns in all worksheets using auto fit. Need to see all information.
35. Print out the formatted spreadsheet.

**JOB 3: Create a 3-D Pie Chart**

Create a 3-D Pie chart from the PBA Summary spreadsheet covering the procedures and the percentage of insurance payments. Move the chart to its own sheet and name the chart tab “PBA Summary Chart”. Format the chart with the following.

* Select the chart style 8
* Quick Layout 1
* Make sure the title of the chart is “Percentage of Insurance Payments.”
* Title is Rockwell Extra Bold font size 16
* Change chart colors to “color 3”.
* Make sure there is no legend showing.
* Print out the formatted chart on one full page in black and white.

**You should have the following printouts:**

Job 1—Unformatted

Job 1—Formulas

Job 2—Formatted

Job 3—3-D Pie Chart