Week 1

1. In the data analysis process, which of the following refers to a phase of analysis? Select all that apply.

- [x] Format data using sorts and filters

Correct
There are four phases of analysis: organize data, format and adjust data, get input from others, and transform data by observing relationships between data points and making calculations.

- [x] Get input from others

Correct
There are four phases of analysis: organize data, format and adjust data, get input from others, and transform data by observing relationships between data points and making calculations.

- [ ] Visualize the data
- [x] Organize data into understandable sections

Correct
There are four phases of analysis: organize data, format and adjust data, get input from others, and transform data by observing relationships between data points and making calculations.

2. During which of the four phases of analysis can you find a correlation between two variables?

- ( ) Get input from others
- (•) Transform data
- ( ) Organize data
- ( ) Format and adjust data

Correct
Finding a correlation between two variables occurs while transforming data.

3. You are performing a calculation during your analysis of a dataset. Which phase of analysis are you in?

- ( ) Get input from others
- (•) Transform data
- ( ) Organize data
- ( ) Format and adjust data

Correct
You are the transform data phase of analysis. This is an example of identifying relationships and patterns between data.

4. Fill in the blank: Sorting ranks data based on a specific _____ that you select.

- ○ model
- ◉ metric
- ○ calculation
- ○ observation

Correct
Sorting ranks data based on a specific metric that you select. This involves arranging the data into a meaningful order to make it easier to understand, analyze, and visualize.

5. A data analyst is sorting spreadsheet data. They want to make sure that, when they rearrange the data, data across rows is kept together. What technique should they use to sort the data?

- ○ Sort Rows
- ○ Sort Column
- ○ Sort Together
- ◉ Sort Sheet

Correct
Sort sheet sorts all of the data in a spreadsheet by a specific sorted column. Data across rows is kept together during the sort.

6. A data analyst sorts a spreadsheet range between cells F19 and G82. They sort in ascending order by the second column, Column G. What is the syntax they are using?

- ◉ =SORT(F19:G82, 2, TRUE)
- ○ =SORT(F19:G82, B, FALSE)
- ○ =SORT(F19:G82, B, TRUE)
- ○ =SORT(F19:G82, 2, FALSE)

Correct
The correct syntax is =SORT(F19:G82, 2, TRUE). The first part of the function sorts the data in the specified range. The 2 represents the second column. And a TRUE statement sorts in ascending order.

7. You are querying a database that contains data about music. You are only interested in data related to the jazz musician Miles Davis. The names of the musicians are listed in the *composer* column.

   You write the SQL query below. Add a WHERE clause that will return only data about music by Miles Davis.

```
1  SELECT
2  *
3  FROM
4  track
5  WHERE composer='Miles Davis'
```

   Run

   Reset

   What track by Miles Davis appears in row 1 of your query result?

   - ○ Compulsion
   - ◉ Now's The Time
   - ○ Summertime
   - ○ So What

   Correct

   The clause `WHERE composer = "Miles Davis"` will return only data about music by Miles Davis. The complete query is `SELECT * FROM track WHERE composer = "Miles Davis"`. The WHERE clause filters results that meet certain conditions. The WHERE clause includes the name of the column, an equals sign, and the value(s) in the column to include.

   The track Now's The Time by Miles Davis appears in row 1 of your query result.

8. You are working with a database that contains invoice data about online music purchases. You are only interested in invoices sent to customers located in the city of Delhi. You want to sort the invoices by order total in ascending order. The order totals are listed in the *total* column.

   You write the SQL query below. Add an ORDER BY clause that will sort the invoices by order total in ascending order.

```
1  SELECT
2  *
3  FROM
4  invoice
5  WHERE
6  billing_city = "Delhi"
7  ORDER BY total;
8
```

   Run

   Reset

   What total appears in row 4 of your query result?

   - ○ 1.98
   - ◉ 3.96
   - ○ 5.94
   - ○ 8.91

   Correct

   The clause `ORDER BY total` will sort the invoices by order total in ascending order. The complete query is `SELECT * FROM invoice WHERE billing_city = "Delhi" ORDER BY total`. The ORDER BY clause tells the database how to organize the data it returns. The ORDER BY clause sorts data in ascending order by default.

Week 2

1. An analyst notes that the “160” in cell A9 is formatted as text, but it should be Australian dollars. What spreadsheet tool can help them select the right format?

   - ○ Format as Dollar
   - ○ CURRENCY
   - ○ EXCHANGE
   - ◉ Format as Currency

   Correct
   The Format as Currency tool can be used to change the text to Australian dollars.

2. You are using a spreadsheet to organize a list of upcoming home repairs. Column A contains the list of repairs, and column B notes the priority of each item on the list: High Priority or Low Priority. What spreadsheet tool can you use to create a drop-down list of priorities for each cell in column B?

   - ○ Pop-up menus
   - ○ Conditional formatting
   - ◉ Data validation
   - ○ Find

   Correct
   Data validation can be used to add drop-down lists with predetermined options for High Priority or Low Priority.

3. You are using a spreadsheet to keep track of your newspaper subscriptions. You add color to indicate if a subscription is current or has expired. Which spreadsheet tool changes how cells appear when values meet each expiration date?

   - ○ Data validation
   - ○ Add color
   - ◉ Conditional formatting
   - ○ CONVERT

   Correct
   You are using conditional formatting. Conditional formatting changes how cells appear when values meet specific conditions.

4. You are analyzing data about the capitals of different countries. In your SQL database, you have one column with the names of the countries and another column with the names of the capitals. What function can you use in your query to combine the countries and capitals into a new column?

- ○ GROUP
- ◉ CONCAT
- ○ JOIN
- ○ COMBINE

Correct
You can use CONCAT, which enables you to join multiple text strings from multiple sources.

5. You are querying a database of museums to determine which ones will have a sculpture exhibit this year. For your project, you only need the first 50 records. What clause should you add to the following SQL query?

```
SELECT museums
FROM museum_table
WHERE exhibit = “sculpture”
```

- ○ LIMIT = 50
- ◉ LIMIT 50
- ○ LIMIT_50
- ○ LIMIT,50

Correct
To return only the first 50 records, type LIMIT 50.

6. A data analyst is working with a spreadsheet that has very long text strings. Rather than counting the characters themselves to determine the number of characters they contain, what tool can they use?

- ○ The MID function
- ○ The CHAR function
- ◉ The LEN function
- ○ The COUNT function

Correct
They can use the LEN function, which counts the number of characters in a text string.

7. Spreadsheet cell E13 contains the text string “Database”. To return the substring “Data”, what is the correct syntax?

- (●) =LEFT(E13, 4)
- ( ) =RIGHT(E13, 4)
- ( ) =LEFT(4,E13)
- ( ) =RIGHT(4,E13)

Correct
The function =LEFT(E13, 4) will return “Data” The LEFT function returns a set number of characters from the left side of a text string. In this case, it returns a four-character substring from the end of the string in E13, starting from the left.

8. When working with a spreadsheet, data analysts use the FIND function to locate specific characters in a string. FIND is case-sensitive, so it’s necessary to input the substring exactly how it appears.

- (●) True
- ( ) False

Correct
FIND is case-sensitive, so it’s necessary to input the substring exactly how it appears.

Week 3

1. In data analytics, what is data aggregation?

- ( ) The process of moving certain data points to a higher rank or position.
- ( ) The process of ensuring a company’s data is properly stored, managed, and maintained.
- (●) The process of gathering data from multiple sources and combining it into a single, summarized collection.
- ( ) The process of modifying data in order to make it suitable for analysis.

Correct
Data aggregation is the process of gathering data from multiple sources and combining it into a single, summarized collection.

2. A data analyst uses the SUM function to add together numbers from a spreadsheet. However, after getting a zero result, they realize the numbers are actually text. What function can they use to convert the text to a numeric value?

- (●) VALUE
- ( ) DIGIT
- ( ) CONVERT
- ( ) FIGURE

Correct
The analyst can use the VALUE function to convert the text that represents a number to a numeric value.

3. When using VLOOKUP, there are some common limitations that data analysts should be aware of. One of these limitations is that VLOOKUP only returns the first match it finds, even if there are many possible matches within the column.

- (●) True
- ( ) False

Correct
One limitation of VLOOKUP is that it only returns the first match it finds, even if there are many possible matches within the column.

4. Fill in the blank: When writing a function, a data analyst wraps a table array in dollar signs. This is an _____ , which is used to lock the array so rows and columns don't change if the function is copied.

- ( ) accurate reference
- (●) absolute reference
- ( ) authentic reference
- ( ) arbitrary reference

Correct
Wrapping a table array in dollar signs creates an absolute reference, which locks the array so rows and columns don't change if the function is copied.

5. The following is a selection from a spreadsheet:

	A	B	C
1	**Country**	**Population in 2020 (millions)**	**Growth in population 2000-2020**
2	China	1,439,323,776	13.4 %
3	India	1,380,004,385	37.1 %
4	United States	331,002,651	17.3 %
5	Indonesia	273,523,615	27.7%
6	Pakistan	220,892,340	44.9%
7	Brazil	212,559,417	21.9%
8	Nigeria	206,139,589	66.3%
9	Bangladesh	164,689,383	27.9%
10	Russia	145,934,462	-0.8%

To search for the population of Pakistan, what is the correct VLOOKUP syntax?

- ○ =VLOOKUP(Pakistan, A2:B10, 3, false)
- ◉ =VLOOKUP("Pakistan", A2:B10, 2, false)
- ○ =VLOOKUP(Pakistan, A2*B10, 2, false)
- ○ =VLOOKUP("Pakistan", A2:B10, 3, false)

Correct
To search for the population of Pakistan, the syntax is =VLOOKUP("Pakistan", A2:B10, 2, false). “Pakistan” is the reference. A2:B10 is the table array. The 2 indicates the number of the column from which the value should be returned. And the word false instructs the function to return an exact match.

6. An INNER JOIN is a function that returns records with matching values in two or more tables. An OUTER JOIN is a function that combines RIGHT and LEFT JOIN to return all matching records in both tables.

- ◉ True
- ○ False

Correct
An INNER JOIN is a function that returns records with matching values in two or more tables. An OUTER JOIN is a function that combines RIGHT and LEFT JOIN to return all matching records in both tables.

7. A data analyst writes a query that asks a database to return only distinct values in a specified range, rather than including repeating values. Which function do they use?

- ○ COUNT
- ○ RETURN
- ○ RETURN VALUES
- ◉ COUNT DISTINCT

Correct
When writing SQL queries, an analyst can use the COUNT DISTINCT function to return only distinct values in a range.

8. When working with subqueries, which part of the query segment executes first?

- ○ The larger query
- ◉ The inner query
- ○ The smaller query
- ○ The outer query

Correct
When working with subqueries, the inner query executes first.

Week 4

1. A data analyst is working with a spreadsheet from a furniture company. To use the template for this spreadsheet, click the link below and select “Use Template.”

   Link to template: Sample Transaction Table.

   Or, if you don’t have a Google account, download the file directly from the attachment below.

   Sample Transaction Table - transactional-data-format-csv
   CSV File

The syntax of which of the following formulas would allow the analyst to count purchase sizes of two or more?

- ○ =COUNTIF(G2:G30, “>=2”)
- ○ =SUMIF(H2:H30, “=4”)
- ○ =SUMIF(G2:G30, “<=1”)
- ◉ =COUNTIF(H2:H30, “>=2”)

Correct
The COUNTIF formula =COUNTIF(H2:H30, “>=2”) has a condition that would allow the analyst to count all purchase size values in Column H that are two or more. The condition is greater than or equal to 2 (“>=2”), so this calculation would return a count of “8” because there are 8 values in Column H that are greater than or equal to 2.

2. You are working in a spreadsheet and use the SUMIF function in the formula below as part of your analysis.

   =SUMIF(D2:D10, ”>=50”, E2:E10)

   Which part of this formula indicates the range of values to be added?

   - ○ =SUMIF
   - ◉ E2:E10
   - ○ >=50
   - ○ D2:D10

   Correct
   The part of the formula that indicates the range of values to be added is “E2:E10”. The first range (D2:D10) is evaluated by the criteria or condition (>=50). Then the values in cells E2 through E10 are added if they correspond to the values in the first range that meet the criteria.

3. A data analyst is working in a spreadsheet and uses the SUMPRODUCT function in the formula below as part of their analysis.

   =SUMPRODUCT(A2:A10,B2:B10)

   How does the SUMPRODUCT function calculate the cell ranges identified in the parentheses?

   - ○ It adds the values in the first range, then adds the values in the second range.
   - ◉ It multiplies the ranges, then adds the sum of the products of the two ranges.
   - ○ It adds the ranges, then multiplies them by the last value in the second array.
   - ○ It multiplies the values in the first range, then multiplies the values in the second range .

   Correct
   =SUMPRODUCT(A2:A10,B2:B10) calculates the cell ranges by multiplying each value in the first range by its corresponding value in the second range (the results are the products). Then, the formula adds those products together.

4. You create a pivot table in a spreadsheet containing movie data. To use the template for this spreadsheet, click the link below and select “Use Template.”

   Link to template: Movie Data Project.

   Or, if you don’t have a Google account, download the file directly from the attachment below.

   Movie Data Starter Project
   XLSX File

If you want to summarize the data using the AVERAGE function in the Values menu, which spreadsheet columns could you add data from? Select all that apply.

- [ ] Genre
- [x] Budget

> **Correct**
> To summarize the data using the AVERAGE function, you could use the Budget column or the Box Office Revenue column. Both have numeric values that the AVERAGE function could calculate.

- [x] Box Office Revenue

> **Correct**
> To summarize the data using the AVERAGE function, you could use the Budget column or the Box Office Revenue column. Both have numeric values that the AVERAGE function could calculate.

- [ ] Movie Title

5. Which part of the following SQL query enables an analyst to control the order of the calculations?

```
SELECT
Yes_Responses,
No_Responses,
Total_Surveys,
(Yes_Responses + No_Responses)  / Total_Surveys AS Responses_Per_Survey
FROM
Survey_1
```

- ○ FROM Survey_1
- ◉ (Yes_Responses + No_Responses)
- ○ AS Responses_Per_Survey
- ○ Yes_responses

> **Correct**
> In a SQL query with calculations, an analyst includes parentheses to control the order of the calculations. The parentheses tell the server which calculation to complete first.

6. You are working with a database table that contains data about music. The table includes columns for *track_id*, *track_name* (name of the music track), *composer*, and *bytes* (digital storage size of the music track). You are only interested in data about the classical musician Johann Sebastian Bach. You want to know the size of each Bach track in kilobytes. You decide to divide bytes by 1000 to get the size in kilobytes, and use the AS command to store the result in a new column called *kilobytes*.

   Add a statement to your SQL query that calculates the size in kilobytes for each track and stores it in a new column as *kilobytes*.

   NOTE: The three dots (...) indicate where to add the statement.

NOTE: The three dots (...) indicate where to add the statement.

```
SELECT
track_id,
track_name,
composer,
bytes,
bytes/1000 as kilobytes
FROM
track
WHERE
track_id=3407
```

Run

Reset

What is the size in kilobytes of the track with Id number 3407?

- ○ 5064
- ○ 2315
- ◉ 3192
- ○ 4744

Correct

You add the statement `bytes / 1000 AS kilobytes` to calculate the size in kilobytes for each track and store it in a new column as kilobytes. The complete query is `SELECT track_id, track_name, composer, bytes, bytes / 1000 AS kilobytes FROM track WHERE composer = "Johann Sebastian Bach"`. The AS command gives a temporary name to the new column.

7. You are working with a database table that contains data about music. The table includes columns for *album_id* and *milliseconds* (duration of the music tracks on each album). You want to find out the total duration for each album in milliseconds, and store the result in a new column named *total_duration*.

   You write the SQL query below. Add a GROUP BY clause that will group the data by album Id number.

```
SELECT
album_id,
SUM(milliseconds) AS total_duration
FROM
track
GROUP BY album_id
```

Run

Reset

What is the total duration of the album with Id number 2?

- ○ 257252
- ○ 959711
- ◉ 342562
- ○ 858088

Correct

You add the clause `GROUP BY album_id` to group the data by album Id number. The complete query is `SELECT album_id, SUM(milliseconds) AS total_duration FROM tracks GROUP BY album_id`. The GROUP BY command groups rows that have the same values from a table into summary rows. GROUP BY is always placed as the last command in a SELECT-FROM-WHERE query.

The total duration of the album with ID number 2 is 342562 milliseconds.

8. You are working with a database table that contains invoice data. The table includes columns for *billing_city*, *billing_country*, and *total*. You want to know the average total price for the invoices billed to the city of Vancouver. You decide to use the AVG function to find the average total, and use the AS command to store the result in a new column called *average_total*.

   Add a statement to your SQL query that calculates the average total and stores it in a new column as *average_total*.

   NOTE: The three dots (...) indicate where to add the statement.

```
SELECT
billing_city,
billing_country,
AVG(total) as average_total
FROM
invoice
WHERE
billing_city = "Vancouver"
```

Run

Reset

What is the average total for Vancouver?

- ○ 6.23
- ○ 5.43
- ◉ 5.51
- ○ 5.80

Correct

You add the statement `AVG(total) AS average_total` to calculate the average total and store it in a new column as average_total. The complete query is `SELECT billing_city, billing_country, AVG(total) AS average_total FROM invoice WHERE billing_city = "Vancouver"`. The AVG function is an aggregate function that returns the average value of a group of values. The AS command gives a temporary name to the new column.

The average total for Vancouver is 5.51.

Course Challenge

1. **Scenario 1, Questions 1-7**

   For the past six months, you have been working for a direct-mail marketing firm as a junior marketing analyst. Direct mail is advertising material sent to people through the mail. These people can be current or prospective customers, clients, or donors. Many charities depend on direct mail for financial support.

   Your company, Directly Dynamic, creates direct-mail pieces with its in-house staff of graphic designers, expert mail list services, and on-site printing. Your team has just been hired by a local nonprofit, Food Justice Rock Springs. The mission of Food Justice Rock Springs is to eliminate food deserts by establishing local gardens, providing mobile pantries, educating residents, and more. Click below to read the email from Tayen Bell, vice president of marketing and outreach.

   C5 Course Challenge, Email From Tayen Bell, Directly Dynamic .pdf
   PDF File

You begin by reviewing the dataset. To use the template for this dataset, click the link below and select "Use Template."

Link to template: Dynamic Dataset

Or, if you don't have a Google account, download the file directly from the attachment below.

Dynamic Dataset
XLSX File

The client has asked you to send two separate mailings: one to people within 50 miles of Rock Springs; the other to anyone outside that area. So, to research each donor's distance from the city, you first need to find out where all of these people live.

You could scroll through 209 rows of data, but you know there is a more efficient way to organize the cities.

Which of the following tools will enable you to sort your spreadsheet by city (Column K) in ascending order?

- (●) Sort Sheet by Column K from A to Z
- ( ) Sort Range by Column K from A to Z
- ( ) Sort Sheet by Column K from Z to A
- ( ) Sort Range by Column K from Z to A

Correct
To sort your spreadsheet by city in ascending order, Sort Sheet by Column K from A to Z. You can also use the SORT function syntax =SORT(A2:R210, 11, TRUE).

2. Scenario 1, continued

You notice that many cells in the city column, Column K, are missing a value. So, you use the zip codes to research the correct cities. Now, you want to add the cities to each donor's row. However, you are concerned about making a mistake, such as a spelling typo.

What spreadsheet tool allows you to control what can and cannot be entered in your worksheet in order to avoid typos?

- ( ) VLOOKUP
- ( ) List
- (●) Data validation
- ( ) Find

Correct
Data validation allows you to control what can and cannot be entered in your worksheet in order to avoid typos. It does this by adding drop-down lists with predetermined options, such as each city name.

3. **Scenario 1, continued**

Now, you decide to address Tayen's request to include a handwritten note in the direct-mail piece for anyone who gave at least $100 last year.

Which of the following spreadsheet tools will enable you to change how cells appear if they contain a value of $100 or more?

- (●) Conditional formatting
- ( ) The MAX function
- ( ) The COUNTA function
- ( ) Data validation

✓ **Correct**
To change how cells appear, use conditional formatting. Choose to format cells if they are greater than or equal to 100.

4. **Scenario 1, continued**

At this point, you notice that the information about state and zip code is in the same cell. However, your company's mailing list software requires states to be on a separate line from zip codes.

To move the 5-digit zip code in cell L2 into its own column, you use the function =LEFT(L2,5).

- ( ) True
- (●) False

✓ **Correct**
To move the 5-digit zip codes in Column L into their own column, you use the RIGHT function: =RIGHT(L2,5).

5. **Scenario 1, continued**

Next, you duplicate your dataset twice using the Sheet Menu. You rename the first sheet Donation Form List, and you remove the cities that are further than 50 miles from Rock Springs. You rename the second sheet Postcard List, and you remove the cities that are within 50 miles of Rock Springs.

Then, you import these datasets into your company's mailing list database. In a mailing list database, you create two tables: Donation_Form_List and Postcard_List. You decide to clean the Donation_Form_List first.

Your company's mailing list software requires units to be on the same line as street addresses. However, they are currently in two separate columns (street_address and unit).

You use a SQL function to instruct the database to combine the two columns into a new column called "address." The syntax is: JOIN(street_address, " to ", unit) as address.

- ( ) True
- (●) False

✓ **Correct**
To combine the two columns into a new column called "address," the syntax is: CONCAT(street_address, " to ", unit) as address.

6. **Scenario 1, continued**

   Your database contains people who live in many areas of Wyoming. However, it's important to align your in-house data with the data from Food Justice Rock Springs. You also need to separate your data into the two lists: Donation_Form_List and Postcard_List. They will be based on each city's distance from Rock Springs.

   What SQL function do you use to select all data from the Donation_Form_List organized by zip code?

   - ○ SEQUENCE
   - ○ ARRANGE BY
   - ◉ ORDER BY
   - ○ ORGANIZE

   ✓ **Correct**
   To select all data from the Donation_Form_List organized by zip code, you use the ORDER BY function. The ORDER BY function sorts results returned in a query.

7. **Scenario 1, continued**

   You finish cleaning your datasets, so you decide to review Tayen's email one more time to make sure you completed the task fully. It's a good thing you checked because you forgot to identify people who have served on the board of directors or board of trustees. She wants to write them a thank-you note, so you need to locate them in the database.

   To retrieve only those records that include people who have served on the board of trustees or on the board of directors, you use the WHERE function. The syntax is:

```
SELECT *
FROM Donation_Form_List
WHERE Board_Member = "TRUE" AND Trustee = "TRUE"
```

   - ○ True
   - ◉ False

   ✓ **Correct**
   To retrieve only those records that include people who have served on the board of trustees or on the board of directors, the syntax must include "OR." Including "AND" will only retrieve records of people who served on both boards. The syntax is:

```
SELECT *
FROM Donation_Form_List
WHERE Board_Member = "TRUE" OR Trustee = "TRUE"
```

8. **Scenario 2, Questions 8-13**

Your company's direct-mail campaign was very successful, and Food Justice Rock Springs has continued partnering with Directly Dynamic. One thing you've been working on is assigning all donors identification numbers. This will enable you to clean and organize the lists more effectively.

Meanwhile, another team member has been creating a prospect list that contains data about people who have indicated interest in getting involved with Food Justice Rock Springs. These people are also assigned a unique ID. Now, you need to compare your donor list with the dataset in your database and collect certain data from both.

What SQL function will return all records from the left table and only the matching records from the right?

- (●) LEFT JOIN
- ( ) OUTER JOIN
- ( ) RIGHT JOIN
- ( ) INNER JOIN

Correct
A LEFT JOIN function will return all records from the left table and only the matching records from the right.

9. **Scenario 2, continued**

Your next task is to identify the average contribution given by donors over the past two years. Tayen will use this information to set a donation minimum for inviting donors to an upcoming event.

You start with 2019. To return average contributions in 2019 (contributions_2019), you use the AVG function. What portion of your SQL statement will instruct the database to find this average and store it in the AvgLineTotal variable?

- ( ) AVG("contributions_2019") IN AvgLineTotal
- ( ) AVG(contributions_2019) = "AvgLineTotal"
- (●) AVG(contributions_2019) AS AvgLineTotal
- ( ) AVG("contributions_2019") AS AvgLineTotal

Correct
To return average contributions in 2019, the correct portion of the SQL query is:

```
AVG(contributions_2019) AS AvgLineTotal
```

10. Scenario 2, continued

Now that you provided her with the average donation amount, Tayen decides to invite 50 people to the grand opening of a new community garden. You return to your New Donor List spreadsheet to determine how much each donor gave in the past two years. You will use that information to identify the 50 top donors and invite them to the event.

What syntax adds the contribution amounts in cells O2 and P2? Select all that apply.

- [ ] =(O2/P2)
- [x] =O2+P2

> **Correct**
> To add cells O2 and P2, use the function =SUM(O2,P2). You can also use the formula =O2+P2.

- [x] =SUM(O2,P2)

> **Correct**
> To add cells O2 and P2, use the function =SUM(O2,P2). You can also use the formula =O2+P2.

- [ ] =O2,P2

11. Scenario 2, continued

Tayen informs you that she's thinking about inviting anyone who donated at least $100 in 2018, as well. However, she only has five open spaces. She asks you to report how many people gave at least $100 so she can determine if they can also be invited to the event.

What is the correct syntax to count how many donations of $100 or greater appear in Column O (Contributions 2018)?

- ( ) =COUNTIF(O2:O210>=100)
- ( ) =COUNTIF(O2:O210,>=100)
- ( ) =COUNTIF(O2:O210">=100")
- (•) =COUNTIF(O2:O210,">=100")

> **Correct**
> To count how many donations of $100 or greater appear in Column Q, the correct syntax is =COUNTIF(O2:O210,">=100").

12. Scenario 2, continued

The community garden grand opening was a success. In addition to the 55 donors Food Justice Rock Springs invited, 20 other prospects attended the event. Now, Tayen wants to know more about the donations that came in from new prospects compared to the original donors.

What is the section of a SQL query that will calculate the percentage of contributions from prospects?

- ("Total_prospects" , "Total_donors" * 100) AS Prospects_Percent
- (Total_prospects * Total_donors / 100) AS Prospects_Percent
- (Total_prospects / Total_donors * 100) AS Prospects_Percent
- (Total_prospects + Total_donors = 100) AS Prospects_Percent

Correct

To identify the percentage of contributions from prospects, the correct query is:

```
(Total_prospects / Total_donors * 100) AS Prospects_Percent
```

13. Scenario 2, continued

Your team creates a highly effective prospects list for Food Justice Rock Springs. After a few months, many of these prospects become donors. Now, Tayen wants to know the top three cities in which these new donors live. She will use that information to determine if it's still true that people who live closer to Rock Springs are more likely to donate.

To retrieve the number of donors in each city, sorted high to low, you use the following query:

```
SELECT COUNT(DonorID), City
FROM new_donor_list
GROUP BY City
ORDER BY COUNT(DonorID) ASC
```

- True
- False

Correct

To retrieve the number of donors in each city, sorted high to low, DESC must be included. ASC will sort the donors low to high. The correct query is:

```
SELECT COUNT(DonorID), City
FROM new_donor_list
GROUP BY City
ORDER BY COUNT(DonorID) DESC
```