

3/07/2019

# Ch-1 Formulas And Functions in Calc.

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Q.1 List the mathematical and comparative operation in Calc.

Ans. (1) Mathematical Operation

<u>Operations</u>	<u>Operator</u>	<u>Order of Evaluation</u>
Exponent	$\wedge$	1
Multiplication	$*$	2
Division	$/$	2
Addition	$+$	3
Subtraction	$-$	3

(2) Comparative Operation

<u>Operator</u>	<u>Operation</u>
$=$	Equal
$>$	Greater than
$<$	Less than
$>=$	Greater than or equal to
$<=$	Less than or equal to
$<>$	Inequality

Q2 Give the precedence of mathematical operators in Calc.

<u>Ans.</u>	<u>Operation</u>	<u>Precedence</u>
	Exponents	1
	Multiplication	2
	Division	2
	Addition	3
	Subtraction	3

Q3 What are the three types of cell referencing? Give differences among them.

Ans. The three types of cell referencing are:-

1) Relative Cell Referencing

In relative cell referencing, the row and column references change when you copy the formula to another cell. By default Calc creates relative cell referencing references in a formula.

2) Absolute Cell Referencing



In absolute cell referencing the row and column reference do not change when you copy a formula because the reference is to a fixed cell address.

### 3) Mixed Cell Referencing

In mixed cell referencing, if the row reference is relative then, the column will be ~~mixed~~ absolute or vice versa.

Q.4 What will you do to view the formulas in a worksheet?

Ans To view formulas in worksheet :-

- 1) Click Tools → Option → Libre Office Calc → View
- 2) Under display, click the check box for formula.

Q.5 What is concatenation? Which character is used for concatenation?

Ans Concatenation means to join strings to create a single string. The character used to concatenate string in Calc is ampersand (&).

Q.6 Give any 2 common formula errors with



their description.

<u>Ans</u>	<u>Errors</u>	<u>Description</u>
1)	######	The column is not wide enough to display the value.
2)	#DIV/0!	The formula contains an invalid operation, i.e., division by zero.

Q.7 Explain the IF function with examples.

<u>Ans</u>	<u>FORMULA</u>	<u>DESCRIPTION</u>	<u>RESULT</u>
	= IF (A1 > B1, "True", "False") where A1 and B1 contains 5 and 10 respectively	Displays the result of a conditional statement. IF the value in cell A1 is greater than B1, then True is displayed otherwise false is displayed	False

Q.8 What are the different ways to open function wizard?

Ans The different ways to open function wizard are:-

1) Click Insert → Function

2) Press Ctrl + F2

3) Click the function Wizard button on the Formula Bar. The Function wizard dialog box appears.

~~Correct~~  
~~AT~~  
~~24/7/19~~



# EXERCISES

## Objective Type Questions

### 1 Fill in the blanks with the correct words.

- A formula in Calc starts with the = sign.
- A reference identifies a cell or a range of cells in a worksheet.
- The operator used for the exponents operation is ^.
- Pointing is the method of cell referencing to click on the cell instead of typing the cell address.
- In an absolute cell reference, the formula uses the \$ sign.

### 2 Write T for the true statement and F for the false one.

- The output of the formula  $=4+5^2$  is 81. **F**
- An example of relative cell reference is \$A\$1. **F**
- By default, Calc creates relative cell referencing. **T**
- The **Sum** button is present on the **Formula Bar**. **T**
- The **Accept** button on the **Formula Bar** works as Enter. **T**

### 3 Choose the correct option.

- A4 represents which type of referencing?  
i. ☒ Relative  
ii. Absolute  
iii. Mixed  
iv. None of these
- Which function is used to find the average of a list of values?  
i. AVG  
ii. ☒ AVERAGE  
iii. AV  
iv. None of these
- If cell C1 has the formula  $=A1+B1$  and it is copied to cell E1, then what will be the formula in cell E1?  
i.  $=A1+B1$   
ii.  $=B1+C1$   
iii. ☒  $=C1+D1$   
iv. None of these
- If cell B2 has the formula  $=A1*A2*\$D\$2$  and it is copied to cell C2, then what will be the formula in cell C2?  
i.  $=A1*A2*\$D\$2$   
ii. ☒  $=B1*B2*\$D\$2$   
iii.  $=A1*B2*\$D\$2$   
iv.  $=B1*A2*\$D\$2$
- Which symbol is used for concatenation of text values?  
i. \$  
ii. #  
iii. ☒ &  
iv. @

## LET'S SUM UP!

- A chart has the following components: X axis, Y axis, chart title, axes titles, chart area, plot area, legend, gridlines, and data label.
- 3D charts have a base area (the X-Y plane) known as the floor and vertical areas (the Y-Z and X-Z planes), known as the walls. The two walls and the floor make up the plot area in a 3D chart.
- We can create various kinds of charts in Calc, such as line, column, 3D stacked, bar, donut, area, net, XY (Scatter), pie, bubble, and stock.
- The line chart shows change over intervals of time.
- The column and bar charts compare values across categories. In a column chart, the category axis is horizontal and the value axis is vertical. Bar charts have the category axis vertical.
- The donut chart shows the relationship of parts to a whole in a manner similar to a pie chart.
- An XY (Scatter) chart shows the relationship among numeric values, or plots points between X and Y values.
- You can change the size of the chart by dragging its corner.
- To change the chart type, click the **Chart Type** button or click **Format ► Chart Type**.
- You can add various chart components by using the **Insert** menu.
- To format a chart component, click the **Format Selection** button on the toolbar that appears once the chart element is selected. You can also right-click the chart element and select the required option.

## EXERCISES

### Objective Type Questions

1 Fill in the blanks with the correct words.

- A chart is a graphical representation of data.
- The X axis is also known as the category axis.
- The chart title is usually placed at the top of the chart.
- The bar chart is the column chart drawn sideways.
- The pie chart is used to plot data for a single data series.





**2 Write T for the true statement and F for the false one.**

- a. The Y axis is the horizontal axis of the chart.
- b. 3D charts have a base area called floor and vertical areas called walls.
- c. The donut chart is similar to a pie chart but contains more than one data series.
- d. The pie chart plots data in concentric circles.
- e. When you create a chart, initially, a column chart will appear on the worksheet.

**3 Choose the correct option.**

- a. To create a chart:
  - ☒ i. Click the **Chart** button on the **Standard** toolbar.
  - ii. Select **Insert ► Chart**
  - iii. Both i. and ii.
  - iv. None of these
- b. To change the chart type:
  - i. Click the **Chart Type** button
  - ii. Click **Format ► Chart Type**
  - iii. Click **Insert ► Chart Type**
  - ☒ iv. Both i. and ii.
- c. It identifies the data series:
  - i. X axis
  - ii. Y axis
  - ☒ iii. Legend
  - iv. Chart title
- d. It provides additional information about a data point on a chart:
  - i. Gridlines
  - ii. Legend
  - ☒ iii. Data Label
  - iv. None of these
- e. The data points are marked as bubbles in this chart:
  - i. XY (Scatter) chart
  - ii. Net chart
  - ☒ iii. Bubble chart
  - iv. Stock chart

**Descriptive Type Questions**

**4 Answer the following.**

- a. Why are charts required? pg 26
- b. What are the different components of a chart?
- c. Describe any three types of charts available in Calc.
- d. How is a pie chart different from a donut chart?
- e. How will you change the size of a chart?
- f. If a chart that you have drawn is not suitable, how will you change it?
- g. How will you format a chart component?