

EXAMPLE - POW and SQRT Functions

In this example, you learn how to compute exponentials and square roots on your numeric data.

Functions:

Item	Description
POW Function	Computes the value of the first argument raised to the value of the second argument.
SQRT Function	Computes the square root of the input parameter. Input value can be a Decimal or Integer literal or a reference to a column containing numeric values. All generated values are non-negative.

Source:

The dataset below contains values for x and y:

X	Y
3	4
4	9
8	10
30	40

Transformation:

You can use the following transformation to generate values for z^2 .

NOTE: Do not add this step to your recipe right now.

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	$(\text{POW}(x,2) + \text{POW}(y,2))$
Parameter: New column name	'Z'

You can see how column Z is generated as the sum of squares of the other two columns, which yields z^2 .

Now, edit the transformation to wrap the value computation in a `SQRT` function. This step is done to compute the value for z, which is the distance between the two points based on the Pythagorean theorem.

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	$\text{SQRT}((\text{POW}(x,2) + \text{POW}(y,2)))$
Parameter: New column name	'Z'

Results:

X	Y	Z
3	4	5
4	9	9.848857801796104
8	10	12.806248474865697
30	40	50