

EXAMPLE - Logical Functions

This example demonstrate the AND, OR, and NOT logical functions.

In this example, the dataset contains results from survey data on two questions about customers. The yes/no answers to each question determine if the customer is 1) still active, and 2) interested in a new offering.

Functions:

Item	Description
AND Function	Returns true if both arguments evaluate to true. Equivalent to the && operator.
OR Function	Returns true if either argument evaluates to true. Equivalent to the operator.
NOT Function	Returns true if the argument evaluates to false, and vice-versa. Equivalent to the ! operator.

Source:

Customer	isActive	isInterested
CustA	Y	Y
CustB	Y	N
CustC	N	Y
CustD	N	N

Transformation:

Customers that are both active and interested should receive a phone call:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	AND(isActive, isInterested)
Parameter: New column name	'phoneCall'

Customers that are either active or interested should receive an email:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	OR(isActive, isInterested)
Parameter: New column name	'sendEmail'

Customers that are neither active or interested should be dropped from consideration for the offering:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	AND(NOT(isActive), NOT(isInterested))

Parameter: New column name	'dropCust'
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A savvy marketer might decide that if a customer receives a phone call, that customer should not be bothered with an email, as well:

Transformation Name	Edit column with formula
Parameter: Columns	sendEmail
Parameter: Formula	IF(phoneCall == "TRUE", FALSE, sendEmail)

Results:

Customer	isActive	isInterested	dropCust	sendEmail	phoneCall
CustA	Y	Y	FALSE	FALSE	TRUE
CustB	Y	N	FALSE	TRUE	FALSE
CustC	N	Y	FALSE	TRUE	FALSE
CustD	N	N	TRUE	FALSE	FALSE