# Sentiment Analysis Tool

The Sentiment Analysis tool can determine whether text responses or comments are more positive or negative.

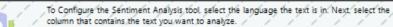
This example uses tools that require the Alteryx Intelligence Suite be installed and licensed before it can be run.

1) Run the workflow (Ctrl+R).

2) Select a tool to view its output in the Results window.



### Sentiment Analysis



The Sentiment Analysis tool adds 4 columns to the data. Negative\_sentiment, positive\_sentiment, and neutral\_sentiment are numeric values between 0 and 1. The closer the value is to 1 the more negative, positive, or neutral the sentiment is. The compound\_sentiment\_score column displays a score from -1 to 1. Negative numbers indicate a negative sentiment, and positive numbers indicate a positive sentiment. A score of 0 indicates a neutral sentiment.

#### Output Categorical Sentiment



The Output Categorical Sentiment option will return a value of positive, negative, or neutral when selected.

The Max Negative Classification value determines how sensitive to negative sentiment the algorithm should be. This can be set to any value between 0 and -1, but the default value of -0.1 is recommended.

The Min Positive Classification value defines how sensitive to positive sentiment the algorithm should be. This can be set to any value between 0 and 1, but the default value of 0.5 is recommended.

#### Sentence Level Sentiment



Select the check box for Find Sentiment at Sentence Level to use punctuation to parse text into sentences before analysis.

Many, algorithms are tuned to find sentiment at the sentence level by parsing sentences, analyzing them separately, and then returning the average compound sentence score for the entire body of text. In order to parse sentences, the text must contain punctuation.

# More Info

Currently, only the Valence Aware Dictionary for Sentiment Reasoning (VADER) algorithm is available. This algorithm measures the valence and magnitude of emotion in text. The valence of emotion refers to whether it is positive or negative and the magnitude refers to how positive or negative it is. VADER also identifies text that is neutral in its valence.

## With and Without Text Pre-processing



The example to the left compares the results of the Sentiment Analysis tool with and without the Text Pre-processing tool. View the output from each anchor of the Join tool to view the how the data was changed and what those changes mean for the sentiment scores.

In most cases, it is recommended that you do not use the Text Pre-processing tool to process text data for use with the Sentiment Analysis tool because it relies on certain features that might get removed. But in other cases, depending on your data, you might need to use the Text Pre-processing tool upstream. Consider whether you need to filter out unwanted digits, punctuation, or stop words. Also consider whether you need to convert words to their roots. For more details about how to configure the Text Pre-processing tool view its One Tool Example: