# Number Formatting

JSONata doesn’t automatically change date or number formats based on your local settings. Instead, it provides tools to format and read dates and numbers using "picture strings" (masks) or by setting the desired precision.

## How to Format for a Specific Locale:

First, you’ll want to figure out the typical number formats for the place you have in mind. For example, whether decimals use commas or periods. Once you know that, just set up your formatting or picture strings to match.

## Examples:

See: [number-formatting.json](https://github.com/JoelGeraci/document-generation-cookbook/blob/main/mergeData/number-formatting.json) for field reference.

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Format** | **JSONata** | **Result** |
| number | US Numeric/2 decimal | $formatNumber(number, '#,##0.00') | {{$formatNumber(number, '#,##0.00')}} |
| long | Rounded number | $round(long, 2) | {{$round(long, 2)}} |
| negNumber | US Numeric/2 decimal | $formatNumber(negNumber, '#,##0.00') | {{$formatNumber(negNumber, '#,##0.00')}} |
| number | US Currency | '$' & $formatNumber(number, '#,##0.00') | {{('$' & $formatNumber(number, '#,##0.00'))}} |
| negNumber | Negative in parenthesis | negNumber < 0 ? "(" & $formatNumber(negNumber \* -1, '#,##0.00') & ")" : $formatNumber (negNumber, '#,##0.00') | {{negNumber < 0 ? '(' & $formatNumber(negNumber \* -1, '#,##0.00') & ')' : $formatNumber (negNumber, '#,##0.00')}} |
| negNumber | Negative in red | negNumber < 0 ? '<span style= "color;red;">' & $formatNumber(negNumber \* -1, '#,##0.00') & '</span>' : $formatNumber (negNumber, '#,##0.00') | {{negNumber < 0 ? '<span style= "color;red;">' & $formatNumber(negNumber \* -1, '#,##0.00') & '</span>' : $formatNumber (negNumber, '#,##0.00')}} |
| ssn | US dash format | $substring($string(ssn), 0, 3) & '-' & $substring($string(ssn), 3, 2) & '-' & $substring($string(ssn), 5, 4) | {{$substring($string(ssn), 0, 3) & '-' & $substring($string(ssn), 3, 2) & '-' & $substring($string(ssn), 5, 4)}} |
| zip9 | Zip Code (zip+4) | $substring($string(zip9), 0, 5) & '-' & $substring($string(zip9), 5, 4) | {{$substring($string(zip9), 0, 5) & '-' & $substring($string(zip9), 5, 4)}} |