```
+++ title = "Transform data" aliases = ["/docs/grafana/latest/panels/transformations/", "/docs/grafana/latest/panels/transformations/config-from-query/", "/docs/grafana/latest/panels/transformations/config-from-query/", "/docs/grafana/latest/panels/transformations/apply-transformations/", "/docs/grafana/latest/panels/transformations/apply-transformations/", "/docs/sources/panels/transform-data/"] weight = 500 + ++
```

Transform data

Transformations are a powerful way to manipulate data returned by a query before the system applies a visualization.

With transformations, you can:

- Rename fields
- Join time series data
- Perform mathematical operations across queries
- Use the output of one transformation as the input to another transformation

This section includes the following topics:

```
\{\{< section > \}\}
```