# MULTIPLE WAYS TO CHANGE AXIS ELEMENTS WITH GGPLOT2



ggplot2 sometimes allows you to achieve the same things with different functions and techniques. In this cheat sheet you can find some examples of how to achieve the same changes to your axes in different ways. All examples start with this code:

```
ggplot(mpg, aes(x = displ, y = cty)) +
  geom_point() +
...
```

## Changing the title of your axis

```
scale_x_continuous(name = "mytitle")

labs(x = "mytitle")

xlab("mytitle")

scale_x_continuous(guide = guide_axis(title = "test"))

guides(
    x = guide_axis(title = "mytitle")
)
```

#### Setting the limits of your axis

```
coord_cartesian(xlim = c(-1, 10))

scale_x_continuous(limits = c(-1, 10))

lims(x = c(-1, 10))

expand_limits(x = c(-1, 10))

xlim(c(-1, 10))

Note: All values outside the limits will be replaced with NAs which can lead to unintended consequences.
```

### Positioning of your axis

```
scale_x_continuous(guide =
   guide_axis(position = "top"))

scale_x_continuous(position = "top")

guides(
   x = guide_axis(position = "top")
)
```

#### Changing the angle of your axis text

```
theme(
  axis.text.x = element_text(angle = 45)
)

scale_x_continuous(guide = guide_axis(angle = 45))

guides(
  x = guide_axis(angle = 45)
)
```

## Dodging the breaks

```
guides(
  x = guide_axis(n.dodge = 2)
)

scale_x_continuous(guide = guide_axis(n.dodge = 2))
```

