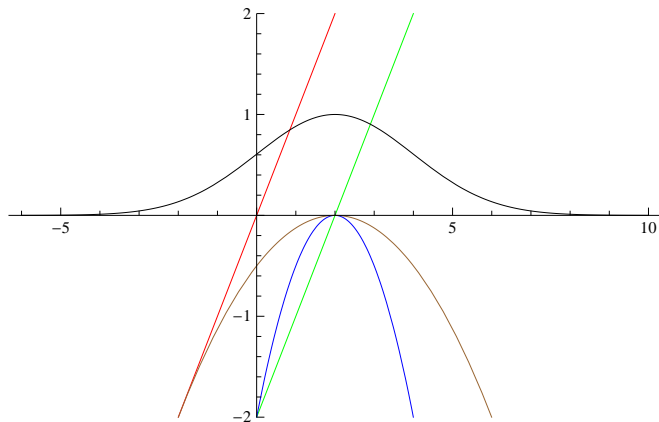# COMPONENTS OF A 1D GAUSSIAN

$\mu = 2, \sigma = 2$

- ▶ Red: $x \mapsto x$
- ▶ Green: $x \mapsto x - \mu$
- ▶ Blue: $x \mapsto -\frac{1}{2}(x - \mu)^2$
- ▶ Brown: $x \mapsto -\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2$
- ▶ Black: $x \mapsto \exp\left(-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2\right)$