

Minimum  
 $\min\{x, y\}$

Harmonic mean:  
 $H(x, y) = \frac{2xy}{x+y}$

Geometric mean:  
 $G(x, y) = \sqrt{xy}$

Arithmetic mean:  
 $A(x, y) = \frac{x+y}{2}$

Root Mean Square (RMS)  
quadratic mean  
Maximum:  
 $\max\{x, y\}$   
 $\text{RMS}(x, y) = \sqrt{\frac{x^2+y^2}{2}}$

Heronian mean  
 $\text{Heron}(x, y) = \frac{1}{3} (x + y + \sqrt{xy})$   
 $= \frac{2}{3}A(x, y) + \frac{1}{3}G(x, y)$

Power means  
Hölder, Minkowski,  $\ell_a$   
 $P_a(x, y) =$   
$$\begin{cases} (x^a + y^a)^{\frac{1}{a}}, & a \neq 0 \\ \sqrt{xy} = G(x, y), & a = 0 \end{cases}$$

