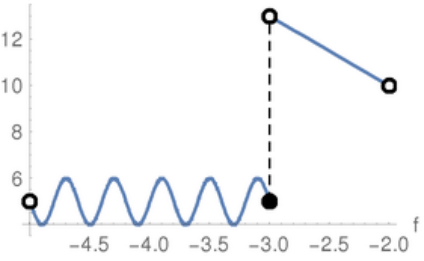
Piecewise Functions

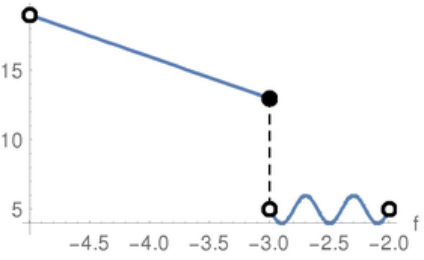
To define piecewise means that the function values and graphs are defined over a particular and generally limited section of the f-axis

$$\begin{cases} \sin(5\pi f) + 5 & -5 < f \leq -3 \\ 4 - 3f & -3 < f < -2 \end{cases}$$



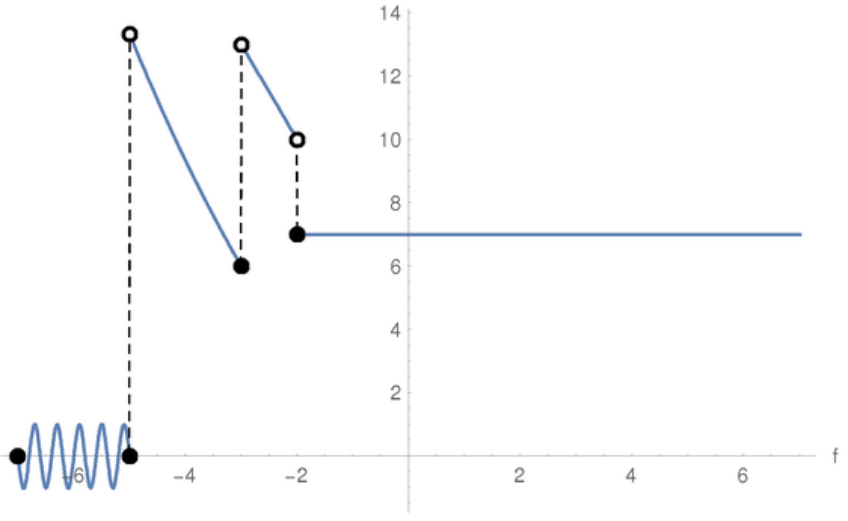
where two functions are juxtaposed together, and for that matter could be pieced differently i.e. swapped:

$$\begin{cases} 4 - 3f & -5 < f \leq -3 \\ \sin(5\pi f) + 5 & -3 < f < -2 \end{cases}$$



More and more complicated functions could be juxtaposed together:

$$\begin{cases} \sin(5\pi f) & -7 \leq f \leq -5 \\ \frac{f^2}{3} - f & -5 < f \leq -3 \\ 4 - 3f & -3 < f < -2 \\ 7 & f \geq -2 \end{cases}$$



Solid disk refers to inclusion of the point or any of ⩽ ⩾ = operators

●

Hollow disk refers to the exclusion or any of the < > operators

○