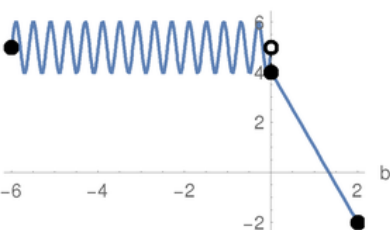


Piecewise Functions

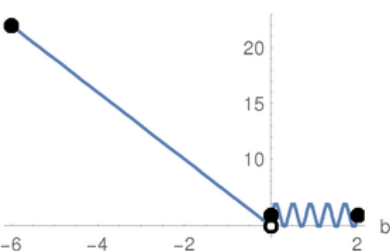
To define piecewise means that the function values and graphs are defined over a particular and generally limited section of the b-axis

$$\begin{cases} \sin(5\pi b) + 5 & -6 \leq b < 0 \\ 4 - 3b & 0 \leq b \leq 2 \end{cases}$$



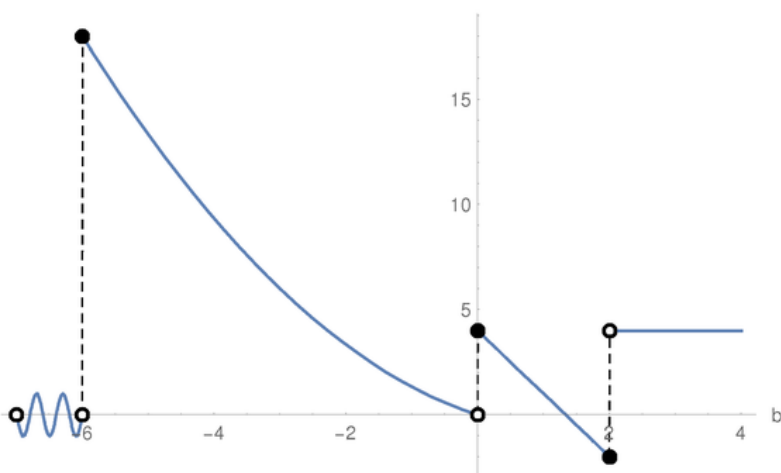
where two functions are juxtaposed together, and for that matter could be pieced differently i.e. swapped:

$$\begin{cases} 4 - 3b & -6 \leq b < 0 \\ \sin(5\pi b) + 5 & 0 \leq b \leq 2 \end{cases}$$



More and more complicated functions could be juxtaposed together:

$$\begin{cases} \sin(5\pi b) & -7 < b < -6 \\ \frac{b^2}{3} - b & -6 \leq b < 0 \\ 4 - 3b & 0 \leq b \leq 2 \\ 4 & b > 2 \end{cases}$$



Solid disk corresponds to inclusion of the point or any of $\leq \geq =$ operators



Hollow disk corresponds to the exclusion or any of the $< >$ operators

