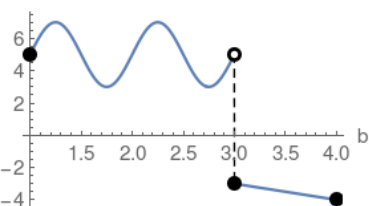


Piecewise Functions

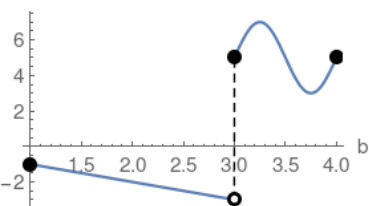
To define piecewise means that the function values and graphs are defined over a particular and generally limited section of the b-axis

$$\begin{cases} 2 \sin(2 \pi b) + 5 & 1 \leq b < 3 \\ -b & 3 \leq b \leq 4 \end{cases}$$



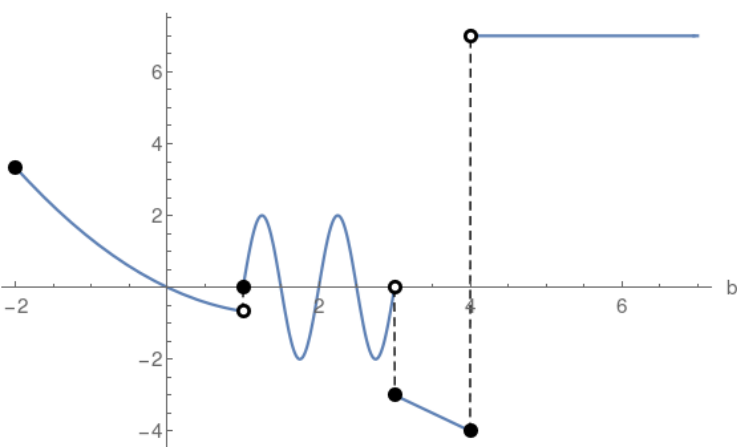
where two functions are glued together, and for that matter could be pieced differently i.e. swapped:

$$\begin{cases} -b & 1 \leq b < 3 \\ 2 \sin(2 \pi b) + 5 & 3 \leq b \leq 4 \end{cases}$$



More and more complicated functions could be glued together:

$$\begin{cases} \frac{b^2}{3} - b & -2 \leq b < 1 \\ 2 \sin(2 \pi b) & 1 \leq b < 3 \\ -b & 3 \leq b \leq 4 \\ 7 & b > 4 \end{cases}$$



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



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

