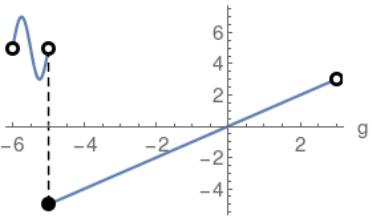
Piecewise Functions

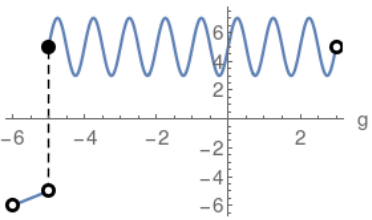
To define piecewise means that the function values and graphs are defined over a particular and generally limited section of the g-axis

$$\begin{cases} 2\sin(2\pi g) + 5 & -6 < g < -5 \\ g & -5 \le g < 3 \end{cases}$$



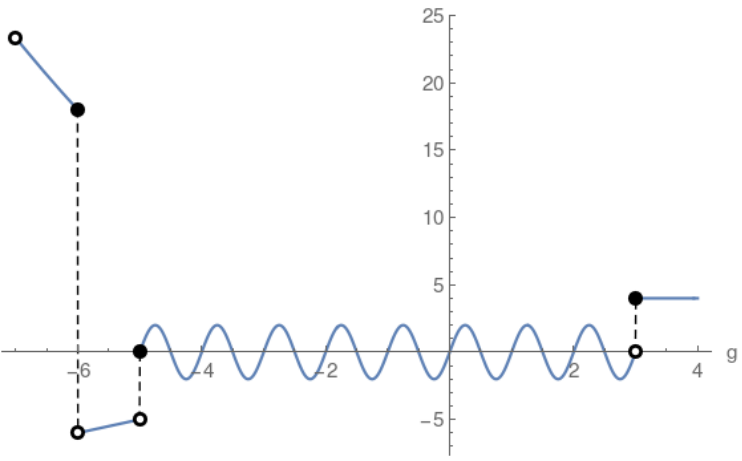
where two functions are placed together, and for that matter could be pieced differently i.e. swapped:

$$\begin{cases} g & -6 < g < -5 \\ 2\sin(2\pi g) + 5 & -5 \le g < 3 \end{cases}$$



More and more complicated functions could be placed together:

$$\begin{cases} \frac{g^2}{3} - g & -7 < g \le -6 \\ g & -6 < g < -5 \\ 2\sin(2\pi g) & -5 \le g < 3 \\ 4 & g \ge 3 \end{cases}$$



Solid disk refers to inclusion of the point or any of $\leqslant$ $\geqslant$ $=$ operators

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

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