Piecewise Composite Functions

$$\lfloor d^2+2 \rfloor, \quad 0 \le d \le 3$$
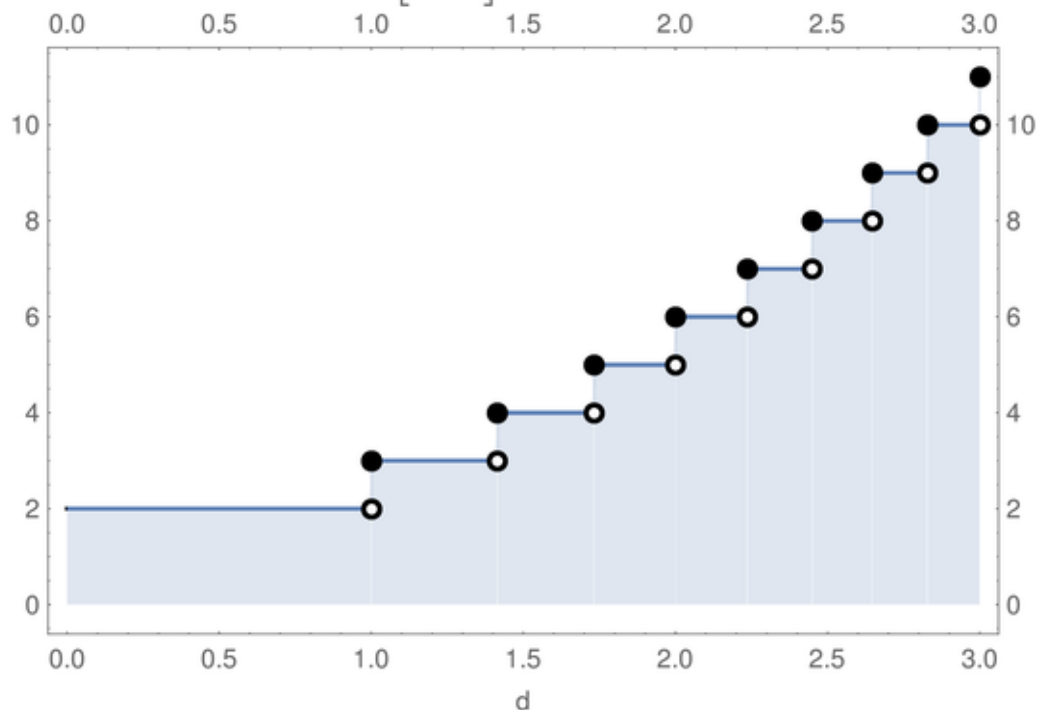
$$\begin{cases} 2 & d < 1 \\ 3 & 1 \le d < \sqrt{2} \\ 4 & \sqrt{2} \le d < \sqrt{3} \\ 5 & \sqrt{3} \le d < 2 \\ 6 & 2 \le d < \sqrt{5} \\ 7 & \sqrt{5} \le d < \sqrt{6} \\ 8 & \sqrt{6} \le d < \sqrt{7} \\ 9 & \sqrt{7} \le d < 2\sqrt{2} \\ 10 & \text{True} \end{cases}$$