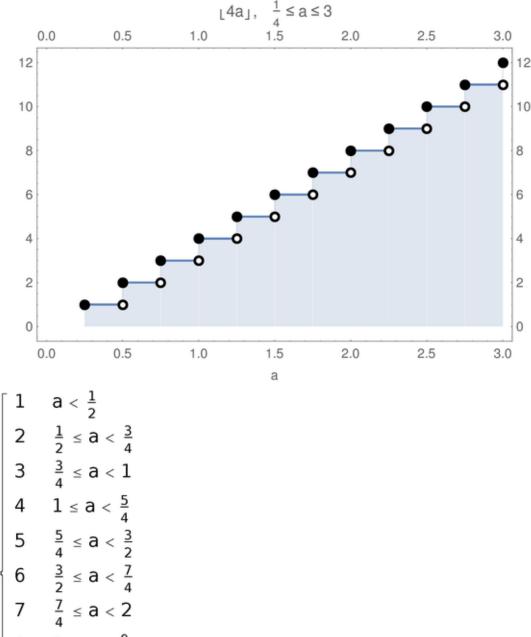
Piecewise Composite Functions



$$\begin{array}{lll}
3 & \frac{1}{4} \leq a < 1 \\
4 & 1 \leq a < \frac{5}{4} \\
5 & \frac{5}{4} \leq a < \frac{3}{2} \\
6 & \frac{3}{2} \leq a < \frac{7}{4} \\
7 & \frac{7}{4} \leq a < 2 \\
8 & 2 \leq a < \frac{9}{4} \\
\end{array}$$

$$6 \frac{3}{2} \le a < \frac{7}{4}$$

$$7 \frac{7}{4} \le a < 2$$

$$8 2 \le a < \frac{9}{4}$$

$$9 9 < a < \frac{5}{4}$$

9

 $\frac{9}{4} \leq a < \frac{5}{2}$

 $\frac{5}{2} \le a < \frac{11}{4}$ 10

11

True