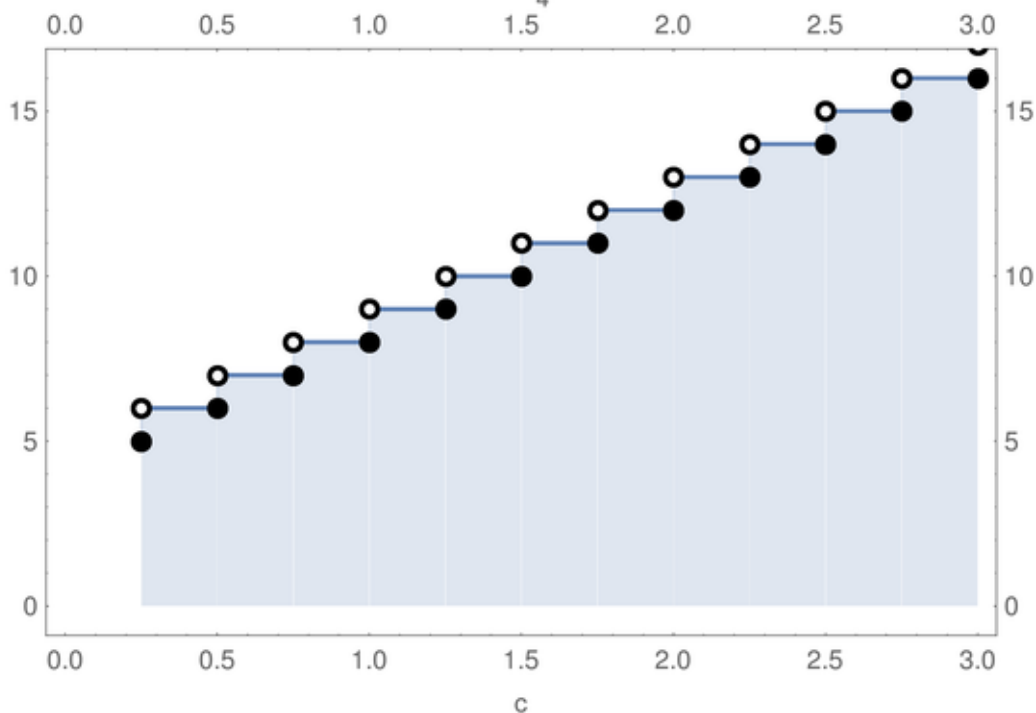# Piecewise Composite Functions

$\lceil 4c+4 \rceil, \quad \frac{1}{4} \le c \le 3$

$$
\begin{cases}
6 & c \le \frac{1}{2} \\
7 & \frac{1}{2} < c \le \frac{3}{4} \\
8 & \frac{3}{4} < c \le 1 \\
9 & 1 < c \le \frac{5}{4} \\
10 & \frac{5}{4} < c \le \frac{3}{2} \\
11 & \frac{3}{2} < c \le \frac{7}{4} \\
12 & \frac{7}{4} < c \le 2 \\
13 & 2 < c \le \frac{9}{4} \\
14 & \frac{9}{4} < c \le \frac{5}{2} \\
15 & \frac{5}{2} < c \le \frac{11}{4} \\
16 & \text{True}
\end{cases}
$$