## Piecewise Composite Functions

$$\begin{bmatrix} z^2 + 1 \\ 1.5 \\ 2.0 \\ 2.5 \\ 3.0 \end{bmatrix}$$

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$$\begin{bmatrix} 3 & z \le \sqrt{2} \\ 4 & \sqrt{2} < z \le \sqrt{3} \\ 5 & \sqrt{3} < z \le 2 \\ 6 & 2 < z \le \sqrt{5} \end{bmatrix}$$

 $7 \qquad \sqrt{5} \, < \, z \, \leq \, \sqrt{6}$