

$$m = 2$$

$$g(\omega)$$

$$1$$

$$\frac{2\pi}{5}$$

$$\frac{4\pi}{5}$$


The graph shows a function  $g(\omega)$  plotted against  $\omega$ . The vertical axis is labeled  $g(\omega)$  and has a tick mark at 1. The horizontal axis has two labeled points:  $\frac{2\pi}{5}$  and  $\frac{4\pi}{5}$ . The function starts at  $(0, 1)$ , decreases to a minimum of 0 at  $\omega = \frac{2\pi}{5}$ , increases to a local maximum, decreases to another minimum of 0 at  $\omega = \frac{4\pi}{5}$ , and then increases again. The curve is smooth and continuous.