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a

$$g(x) = 2x(1-x)$$

$$\begin{aligned} g(0) &= 2(0)(1-0) \\ &= 0 \quad \checkmark \end{aligned}$$

$$\begin{aligned} g\left(\frac{1}{2}\right) &= 2\left(\frac{1}{2}\right)\left(1-\frac{1}{2}\right) \\ &= \frac{1}{2} \quad \checkmark \end{aligned}$$