

G. The function f , defined for whole positive numbers, satisfies $f(1) = 1$ and also the rules

$$\begin{aligned}f(2n) &= 2f(n), \\f(2n+1) &= 4f(n),\end{aligned}$$

for all values of n . How many numbers n satisfy $f(n) = 16$?

- (a) 3, (b) 4, (c) 5, (d) 6.