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1. $F(n) = \Omega(g(n))$ implies $g(n) = 0(f(n))$

   Answer: True

   By definition
   $f(n) = \Omega(g(n))$ which implies $0 <= c.g(n) <= f(n)$
   $g(n) = 0(f(n))$ which implies $0 <= g(n) <= c.f(n)$
   Let us assume that $f(n) = 100n^2$, $g(n) = n^2$
   $f(n) >= c.g(n)$
   $100.n^2 >= c.n^2$
   Consider the constant $c = 50$
   $100n^2 >= 50n^2$
   2 ¿= 1
   $g(n) = 0(f(n))$ which is equal to
   $c.f(n) >= g(n)$
   $c.100.n^2 >= n^2$
   $50.100.n^2 >= n^2$
   5000 ¿= 1

   Based on the above equations $F(n) = \Omega(g(n))$ implies $g(n) = 0(f(n))$ is true.