Calculus Exercises (8.6)

Find the power series representation for the function and determine the radius of convergence.

(求冪級數表示式與收斂半徑)

(1) \( f(x) = \frac{1}{x-2} \)  
(2) \( h(x) = \frac{x^3}{x-2} \)  
(3) \( g(x) = \frac{1}{(x-2)^2} \)

(4) \( F(x) = \ln(2-x) \)  
(5) \( G(x) = \ln(2-x^3) \)