Sketch the ambient, diffuse, specular, and total illumination for the following scene as a function of x. Assume the Phong illumination model, i.e., $I = k_a I_a + k_d I_d (N \cdot L) + k_s I_s (R \cdot V)^n$, where $k_a = 0.3, k_d = 0.7, k_s = 0.7, I_a = I_d = I_s = 1.0, n = 100$.

ambient $= k_a I_a$

$(0.3)(1.0)$

diffuse $= k_d I_d (N \cdot L)$

0.7

specular $= 0.7 (R \cdot V)^n$