

$$I = I_a k_a + I_i (I_{diff}) (N \cdot L) + k_{spec} (R \cdot V)^n$$

$$P_1 = (1, 1, 1)$$

$$P_2 = (0, 2, 1)$$

$$P_3 = (0, 0, 1)$$

The ambient of the triangle is $a = 0.107 \approx 0.07$

after that diffux of triangle will be w

$$w = (P_1 - P_3) \cdot (P_2 - P_3)$$

$$N = (1, 1, 0) \cdot (0, 2, 0) \cdot (0, 0, 1) \cdot T$$

$$L = (1, 1, 5) \cdot T - (0, 33, 1, 1) \cdot T = (0.164, 0, 0.986) \cdot T$$

now the specular $R = 2N(N \cdot L) - L$

$$2(0, 0, 1) \cdot T [0.986] - (0.164, 0, 0.986) \cdot T \\ = (-0.164, 0, 0.986) \cdot T$$

Hence if the triangle is colored we Ambient
as $= 0.07$