Nets and Ops - Part 1

1. EAT = a + p S a = base access time p = page fault rate s = service a page fault

a = 150 nano = 150 X 10^-9

p = 1.0 X 10^-5 = 0.00001

S = 150 micro = 150 X 10^-6

**Conversion**

a = 150 nano

p= 0.00001

S= 150 micro = 150 X 10^-6 = 150000 X 10^-9 = 150000 nano

**Calculation**

p X S = 0.00001 X 150000 = 1.5

a + p = 150 + 1.5 = 151.5

**Answer to 3 significant figures**

151

1. Degradation = 100 \* (EAT - a)/a

**Calculation**

EAT – a = 151 – 150 = 1 nano

100\*(EAT - a) = 100\* 1 = 100

100 \* (EAT - a)/a = 100 / 150 = 0.666r = 66.6%

**Answer to 3 significant figures**

66.6%