Lab 3:

Q0:
P = C(*kn*) P^k (1-P)^*n-k*
(k = 0, P = 0.1)

C(*0n) x* 0.1^0 *x* 0.9^n
=C(*0n) x* 0.9^n

n= 15, P=0.21
1-P = 0.79
n= 16, P = 0.19
1-P = 0.81 therefore 16 shots needed for the player to have a probability of 80% to kill a monster.

Q1:
10 => 00001010
1 => 00000001
5 => 00000101
65 => 01000001
It will send packet to 10.1.5.64 as the bits match destination and will be sent to s0 interface.

Q2:
131=> 10000011
23 => 00010111
153=> 10010111
76=> 01001100
It will go to 1 output reference. The most bits match from 131.22.0.0/15 to 131.23.151.76 in comparison to other prefixes
Q3:

1. Next hop D
2. Next hop B
3. Next Hop D