1.

f(n) = f(n/2) + 2

f(1) = 2

f(2) = f(2/2) + 2 = 2 + 2 = 4

f(4) = f(4/2) + 2 = 4 + 2 = 6

f(8) = f(8/2) + 2 = 6 + 2 = 8

f(16) = f(16/2) + 2 = 8 + 2 = 10

f(32) = f(32/2) + 2 = 10 + 2 = 12

f(64) = f(64/2) + 2 = 12 + 2 = 14

7.

a) f(3) = f(1) + 1 = 1 + 1 = 2

b)

f(9) = f(3) + 1 = 2 + 1 = 3

f(27) = f(9) + 1 = 3 + 1 = 4

c)

f(81) = f(27) + 1 = 4 + 1 = 5

f(243) = f(81) + 1 = 5 + 1 = 6

f(729) = f(243) + 1 = 6 + 1 = 7