**Masters theorem**

**Masters theorem for decreasing function: -**

Recurrence relation form: : , assume that a > 0 and b > 0 and = O() and   
  
we have three cases:-

* Case1: if a < 1 🡺
* Case2: if a = 1 🡺
* Case3: if a > 1 🡺

Examples: -

1.

2.

3.

**Masters theorem for dividing function: -**

Recurrence relation form:

We have three cases: -

* Case1:
* Case2: and
* Case3:

Examples: -

1.

2.

3.

4.

5.

.

7.