Algorithmics	Student information	Date	Number of session
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Activity 1. Basic recursive models.

Divison1: For this packet a= 1, b=3 and k=1. Since b^k is bigger than a, the complexity is O (n^k) which is equal to O (n).

Divison2: For this packet a= 2, b=2 and k=1. Since b^k equals a, the complexity is O (n^k*logn) which is equal to O (n*logn).

Division3: For this packet a= 2, b=2 and k=0. Since b^k is smaller than a, the complexity is O (n^logb^a) which is equal to O (n).

Division4: For this packet a= 4, b=2 and k=1. Since b^k is smaller than a, the complexity is O (n^logb^a) which is equal to O (n^2).

Substraction1: For this packet a= 1, b=1 and k=0. Since a is equal to 1, the complexity is O (n^k+1) which is equal to O (n).

Substraction2: For this packet a= 1, b=1 and k=0. Since a is equal to 1, the complexity is O (n^k+1) which is equal to O (n^2).

Substraction3: For this packet a= 2, b=1 and k=0. Since a is bigger than 1, the complexity is O (a^n/b) which is equal to O (2^n).

Substraction4: For this packet a= 3, b=2 and k=0. Since a is bigger than 1, the complexity is O (a^n/b) which is equal to O (3^(n/2)).