

a	The seller's <u>ask</u>
k	Number of VM types proposed by the seller
s_i	<u>Supplied</u> amount of VMs of type $i \leq k$
o_i	Reserve (<u>offer</u>) price for the VM of type $i \leq k$
U	Set of buyers (<u>users</u>) $\{u_1, \dots, u_n\}$
b_j	<u>Bid</u> of the buyer u_j
r_{ij}	The amount of VMs (<u>resource</u>) of type $i \leq k$ requested by the user u_j
d_j	The bundle of VMs requested (<u>demand</u>) by u_j
v_j	Declared <u>valuation</u> of the user u_j
p_j	<u>Price</u> that the user u_j pays
W	Set of <u>winning</u> buyers $W \subseteq U$