

	$OS_{(1,1)}(\mathbf{x})$	$OS_{(1,2)}(\mathbf{x})$	$OS_{(2,3)}(\mathbf{x})$
S_1	6	7	7
S_2	7	7	9
S_3	7	7	7

Table 5: $h - k$ -order statistics of students' notes

Several researchers have proposed methods for ranking fuzzy numbers, see, e.g. [4] and the references therein.

Another relevant example is the ordered weighted averaging (OWA) operator introduced in [12], which has been studied in situations involving imprecise evaluations expressed by fuzzy numbers [9, 1, 2, 3, 5, 12].

Also in the context of multiple attribute group decision making problems it is assumed that the attribute values take the form of fuzzy numbers, see [11] and the references within.

However in the majority of cited papers it is faced the problem of ranking fuzzy numbers, while in this paper we have proposed innovative methods to aggregate imprecise information expressed by fuzzy numbers.

Finally let us note as in some context, like that of group decision making, it is often assumed that the more suitable form to express valuations is that of a generalized interval-valued trapezoidal fuzzy numbers [11]. These are more general form of fuzzy numbers and we hope that the aggregation of such a type of complex information will be the topic for future researches.

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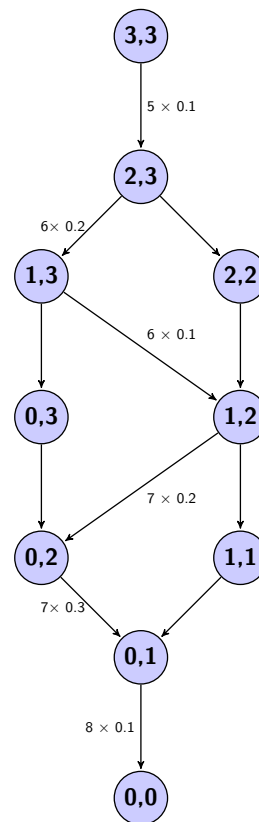


Figure 2: 2-OWA of student S_1 on the lattice $Q_{\#}$

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