

- Fill the nonempty atoms of the information diagram with arbitrary nonnegative numbers  $a, b, \dots, g$ .
- Theorem 3.11 says that there exist r.v.'s  $X, Y$ , and  $Z$  whose  $I$ -measure  $\mu^*$  is as shown.
- This can be seen by considering mutually independent r.v.'s  $A, B, \dots, G$  with entropies  $a, b, \dots, g$ , respectively, and let

$$X = (A, B, C, D)$$

$$Y = (B, D, E, F)$$

$$Z = (C, D, F, G).$$