

If  $S$  is a set of vertices in  $G$  with  $s \in S$  and  $t \notin S$ , the **cut** induced by  $S$  is the set of arcs **from**  $S$  **to**  $\bar{S}$ . Denote the cut by  $(S, \bar{S})$ .

The **capacity** of  $(S, \bar{S})$  is

$$c(S, \bar{S}) = \sum_{x \in S, y \in \bar{S}} c(x, y)$$

What is the **capacity** of  $(S, \bar{S})$ , for  $S = \{s, a, b, c\}$ ?

