

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 each of the following?

- $S = \{s\}$
- $S = \{s, a\}$
- $S = \{s, a, c\}$

