

2023mar29

Monday, February 27, 2023 12:58

$$\|r_i(s) - r_j(g)\| = \sqrt{(x_i - x_j)^2 + (y_i - y_j)^2 + (-)^2}$$

$$h(s) = \sum_{i=1}^n \min_{j=1}^m \|r_i(s) - r_j(g)\|$$

① Each brick needs to go to some j :

$$d(s, g) = \sum_{i=1}^n \|r_i(s) - r_{j(i)}(g)\|$$

... which is $\leq h(s)$

$j(i)$ = position to which
brick needs to go

②

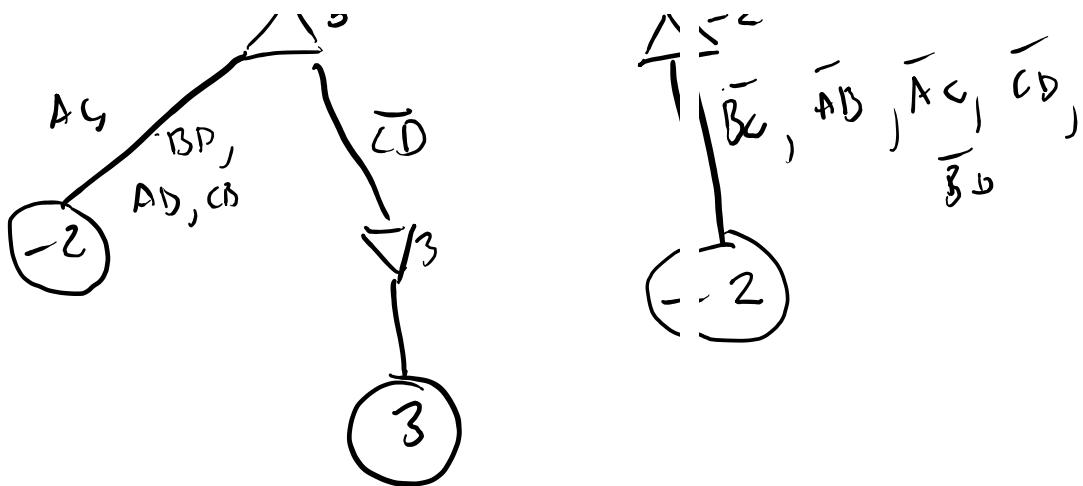
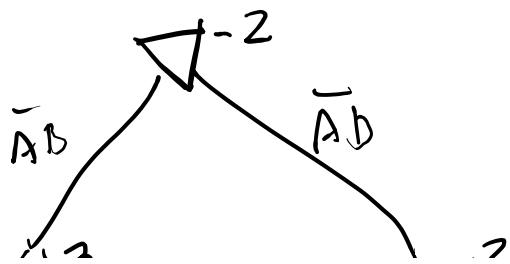
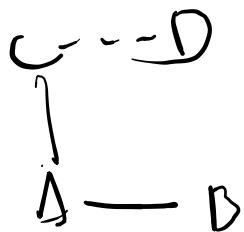
$$h(s) = \sum_{i=1}^n \min_{j=1}^m \|r_i(s) - r_j(g)\|$$
$$\leq \sum_{i=1}^n \|r_i(s) - r_{j(i)}(g)\|$$

For any mapping $j(\cdot)$

$$\min_{j \in m} \|r_i(s) - r_j(g)\| \leq \|r_i(s) - r_{j(i)}(g)\|$$

$h(s) \leq d(s, goal) \Leftrightarrow$ ADmissible

Q2



MINMAX: -2

seq: \bar{AO}, \bar{BC}