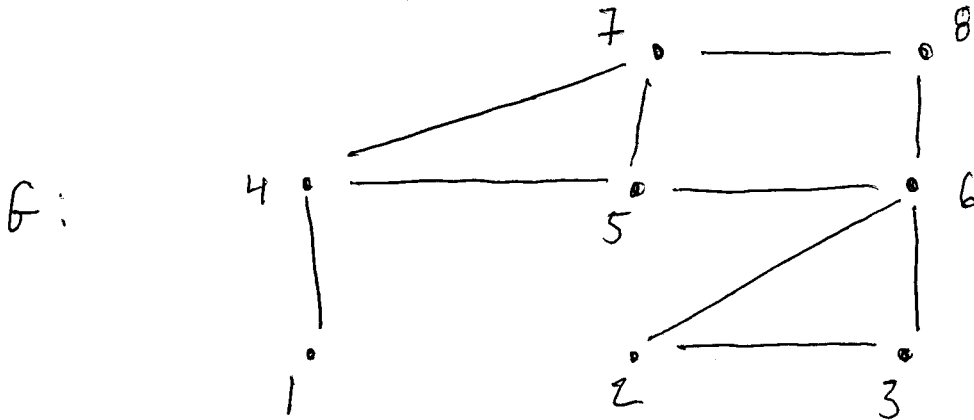


AM 169

Assignment 7

(due 11/29/00)

(assigned 11/13/00)

Dynamic Programming on General Graphs

$$P(x) = K \left( \frac{1}{1 + |x_1 - x_4|} \right) \frac{(x_4 \cdot x_7)^{x_5}}{x_5!} e^{-x_4 x_7}$$

$$\cdot e^{\left\{ -(x_7 - x_8)^2 - (x_5 - x_6)^2 - (x_6 - x_8)^2 \right\}} e^{-x_2 x_3 x_6}$$

$$x_2 x_6 e$$

state space  $S = \{1, 2, \dots, 10\}$

1) Find  $\arg \max P(x)$ . (Use logs)

2) Compute  $K$ .