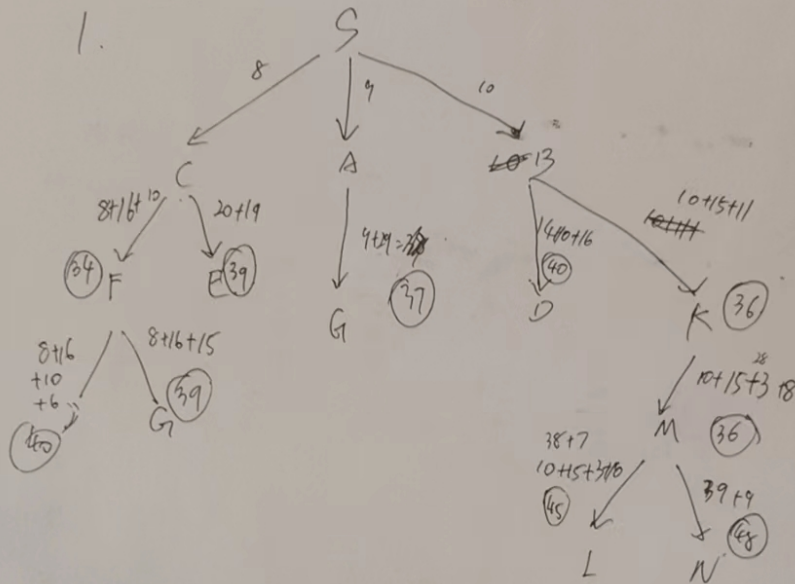


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① solution path SAG cost 37

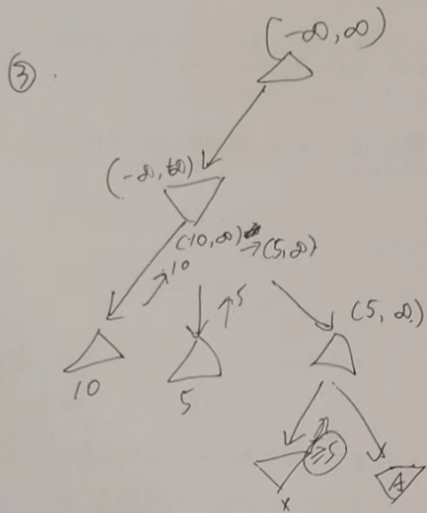
② a. Yes.

② b No. $h(e) = 23$ $g(e) = 5$ $h(c) = 17$
 $h(e) > g(e) + h(c)$

② c.

A 40 B 27 C 20 D 15 E 25 F 22.
 G 0 K 9.

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if $x > 5$ then
A is should be prune

③ $x > 5$

④ a. ~~Circle is white. square is black.~~
~~K 1/1 H 0/2 C 4/5 A 10/24~~
~~black win.~~

④ b. ~~K (1/1) H (0/2) C (4/5) A (10/24)~~

④ c. ~~D (5/6) < B (5/4) < C (4/5). A should be choose C~~

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(4). A is black, next is write.

so circles is black, square is write.

K 0/1, H 1/2, C 3/5, A 11/24.

A black 11/24. so (4)-a. write is wins

(4)-b K(0/1) H(1/2) C(3/5) A(11/24)

(4)-c choose base on w/N ratio.

$D(5/6) < B(5/9) < C(3/5)$ A will choose C

$$5. res = \frac{P(C, Y=T) P(X_1=T | Y=T) P(X_2=F | Y=T) P(X_3=T | Y=T) P(X_4=F | Y=T)}{\sum P(y) \dots \dots \dots P(X_5=T | Y=T)}$$

$$= \frac{0.2 \times 0.6 \times 0.4 \times 0.6 \times 0.4 \times 0.6}{0.2 \times 0.6 \times 0.4 \times 0.6 \times 0.4 \times 0.6 + 0.8 \times 0.3 \times 0.7 \times 0.3 \times 0.7 \times 0.3}$$

$$= \cancel{0.0613} 0.3950$$