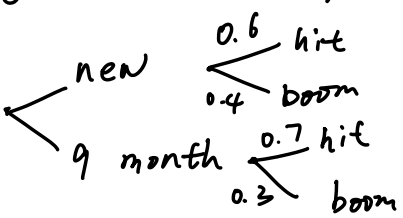
21-S1-Q5

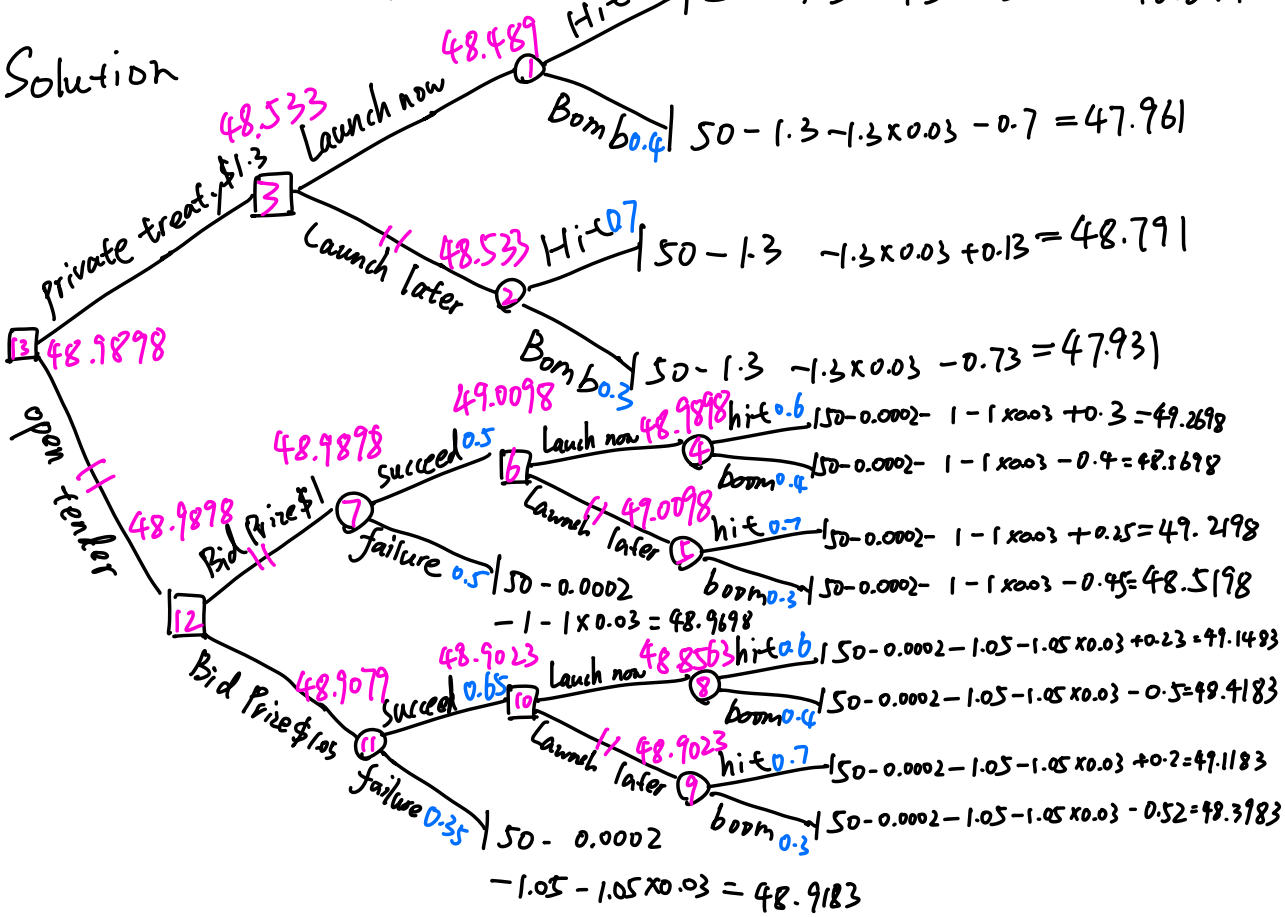
Q: (a) decision tree

$50 $1 $1 0.5 $1.5 0.65 $1.3

$0.0002 3%



Solution

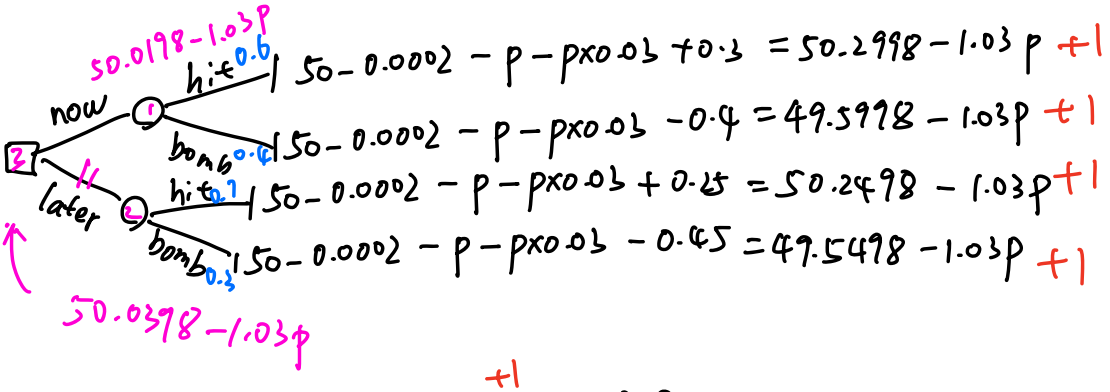


(b) Recommend: ① open tender

② Bid Prize $1 billions

③ if succeed, launch later

(c) $Q : p \longrightarrow 50 + 0.1p$



$$50 + 0.1p = 50.0398 \overset{+1}{-} 1.03p$$

$$1.13p = 0.0398 \overset{+1}{}$$

$$p = 0.03522 \quad 0.9202$$

① 出价 \$1 ，\$1.05 ，\$1.3 后的资产都算 \$1 吗?

② 如果都是 1，要加在决策树最后吗?