

Chapter 16 Making Simple Decisions

CS5811

November 4, 2020

Wednesday

combined two performance ticket

(buy in advance)

\$30

①

at the door tickets

\$20

"value" of attending a performance

\$20

probability of finding time to attend a performance 0.4

	ft_1	ft_2	probability	value to me	costs w/ at the door tickets	w/ advance ticket	total value when advance
ft_1	ft_2	$0.4 \times 0.4 = 0.16$	\$40	\$40	\$30	\$10	
ft_1	$\neg ft_2$	$0.4 \times 0.6 = 0.24$	\$20	\$20	\$30	-\$10	
$\neg ft_1$	ft_2	$0.6 \times 0.4 = 0.24$	\$20	\$20	\$30	-\$10	
$\neg ft_1$	$\neg ft_2$	$0.6 \times 0.6 = 0.36$	\$0	\$0	\$30	-\$30	

expected value of buying a discount ticket

$$\sum_{\text{cases } c} P(c) \times \text{value}(c)$$

$$0.16 \times 10 + 0.24(-10) + 0.24(-10) + 0.36(-30)$$

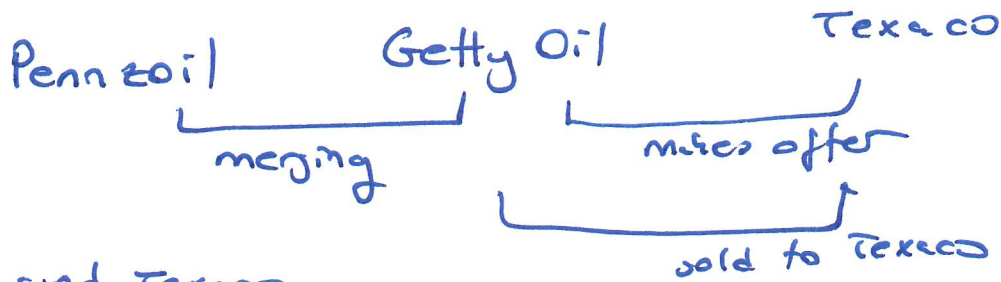
$$= -14$$

$P(ft_i)$	Expected value
0.4	-14
0.5	-10
0.6	-6
0.7	-2
0.75	0
0.8	2
0.9	6
1	10

decision network

decision tree

(2)



sued Texaco
win \$11.1B
court loses \$9.1B
with costs \$10.3B

said file for bankruptcy
follow up w/ Supreme court
\$2B to settle

Liedtke \$3B - \$5B
advisors

Liedtke's decision tree

