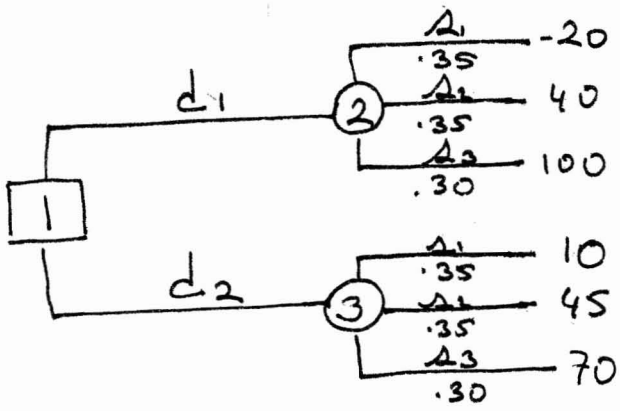
(25)

s_1 = low demand
s_2 = medium "
s_3 = high "

a. d_1 = manufacture component
d_2 = purchase "



$EV(\text{node } 2) = (.35)(-20) + (.35)(40) + (.30)(100) = 37$

$EV(\text{node } 3) = (.35)(10) + (.35)(45) + (.30)(70) = 40.25$ * recommend to purchase

b. opt. l dec. strategy with perfect info.:

if $s_1 \rightarrow d_2$
" $s_2 \rightarrow d_2$
" $s_3 \rightarrow d_1$

	.35 s_1	.35 s_2	.30 s_3
d_1	-20	40	100*
d_2	10*	45*	70

EV of this strategy is $(EV\,w\,PI) = (.35)(10) + (.35)(45) + (.30)(100)$
$= 49.25$

$\therefore EVPI = (EV\,w\,PI) - (EV\,wo\,PI) = 49.25 - 40.25 = 9.0$

If the company can get a better estimate for demand under 9K, they may consider it, o.w. not worth it.