

Cost-Benefit Practice Problem #3

You are an attorney for the County of Hawaii. The county has been sued by a mother whose precious young son fell off of a swing at a county park. You have two options: hire an expert witness or do not hire an expert witness. If you hire the expert witness, you have a 70% chance of winning the case. If you do not hire the expert witness, you have a 50% chance of winning the case. Winning the case costs \$1,000. Losing the case costs \$10,000. The expert witness costs \$500 to hire. What do you do?

Outcomes	Options	
	<i>Hire Expert Witness</i>	<i>Do Not Hire Expert Witness</i>
<i>Win</i>	70% chance C = 1,000 + 500 C = 1,500	50% chance C = 1,000
<i>Lose</i>	30% chance C = 10,000 + 500 C = 10,500	50% chance C = 10,000
Total Decision Result	= .7(1,500) + .3(10,500) = 1,050 + 3,150 = 4,200	= .5(1,000) + .5(10,000) = 500 + 5,000 = 5,500

It is estimated to cost less to hire the expert witness (\$4,650) than to not hire the expert witness (\$5,500). So you hire the expert witness.