

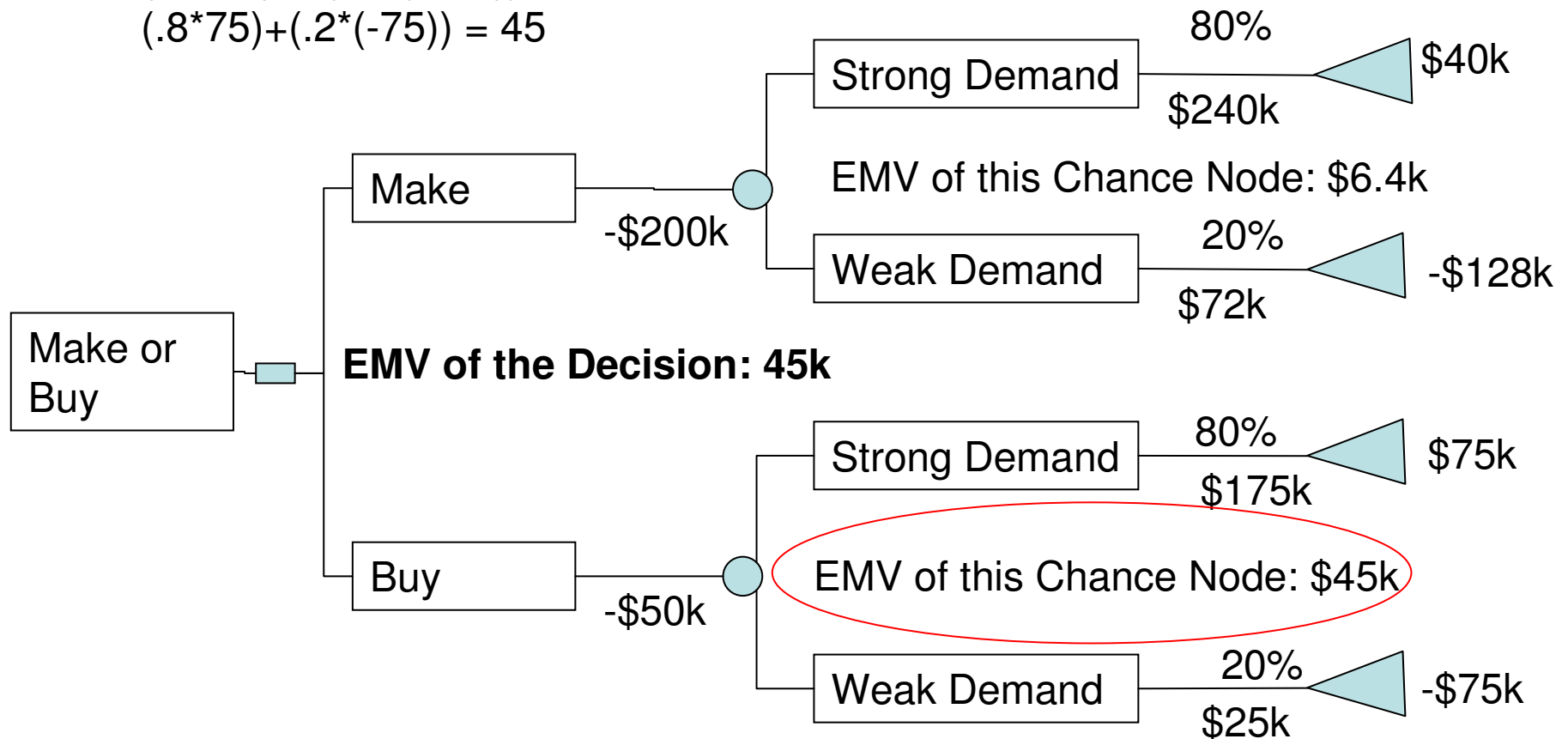
# CEE 9510 Assignment 5 Answer Key



## Question 1

$$(.8 * 40) + (.2 * (-128)) = 6.4$$

$$(.8 * 75) + (.2 * (-75)) = 45$$



You decide to buy the pistons.

In this scenario buying pistons makes more financial sense than making them.

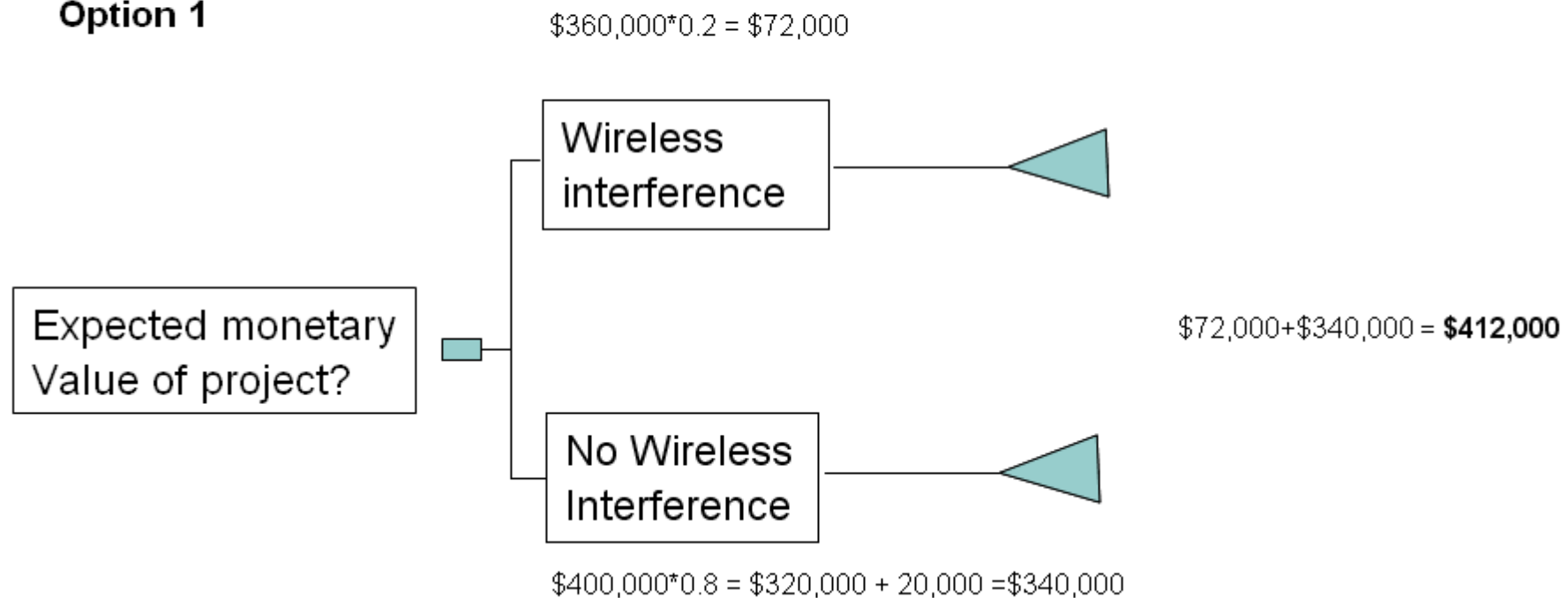
Risk	Mitigation Strategy
You senior engine expert and your senior materials scientist retire.	Accept - Your succession plan is already in place.
Your piston material in the make option is coming from Japan. The earthquake has disrupted your flow of material.	Transfer - Take out insurance
A new supplier comes on to the scene which makes your business development team reset the target pricing to \$58.50	Minimize - Crash the timeline and try to beat them to market
Buy strategy applied and the supplier cannot keep pace with requirements	Share - Write into contract that purchasing price goes down in this scenario.
Huge spike in O-ring material prices in either option - another less durable material considered	Contingency Reserve - Pay the extra amount and stick to the technical solution.

The student can have any reasonable risks listed, as long as they apply One of the five mitigation alternatives listed above in each case.

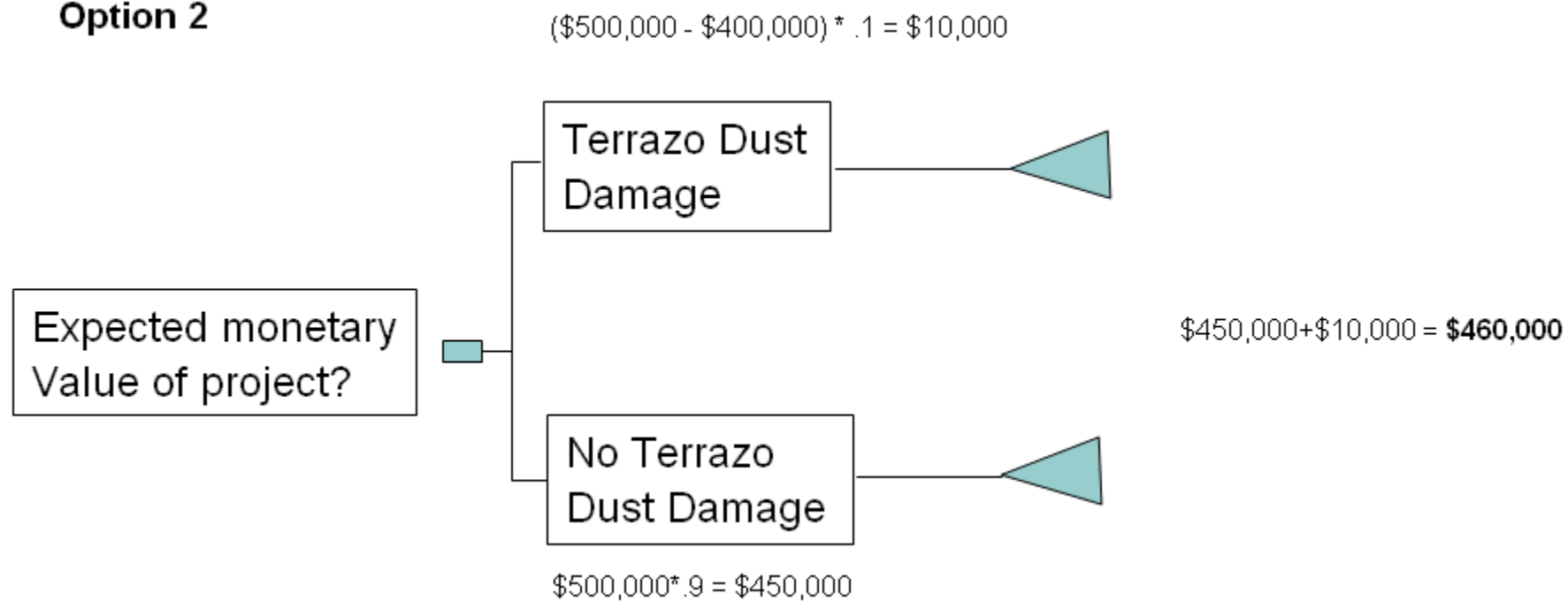
## Question 2

The Student needs to remember there is no margin on a realized risk. That is your cost, not the owner's cost! The 2 projects the contracting firms should consider are options 2 and 3.

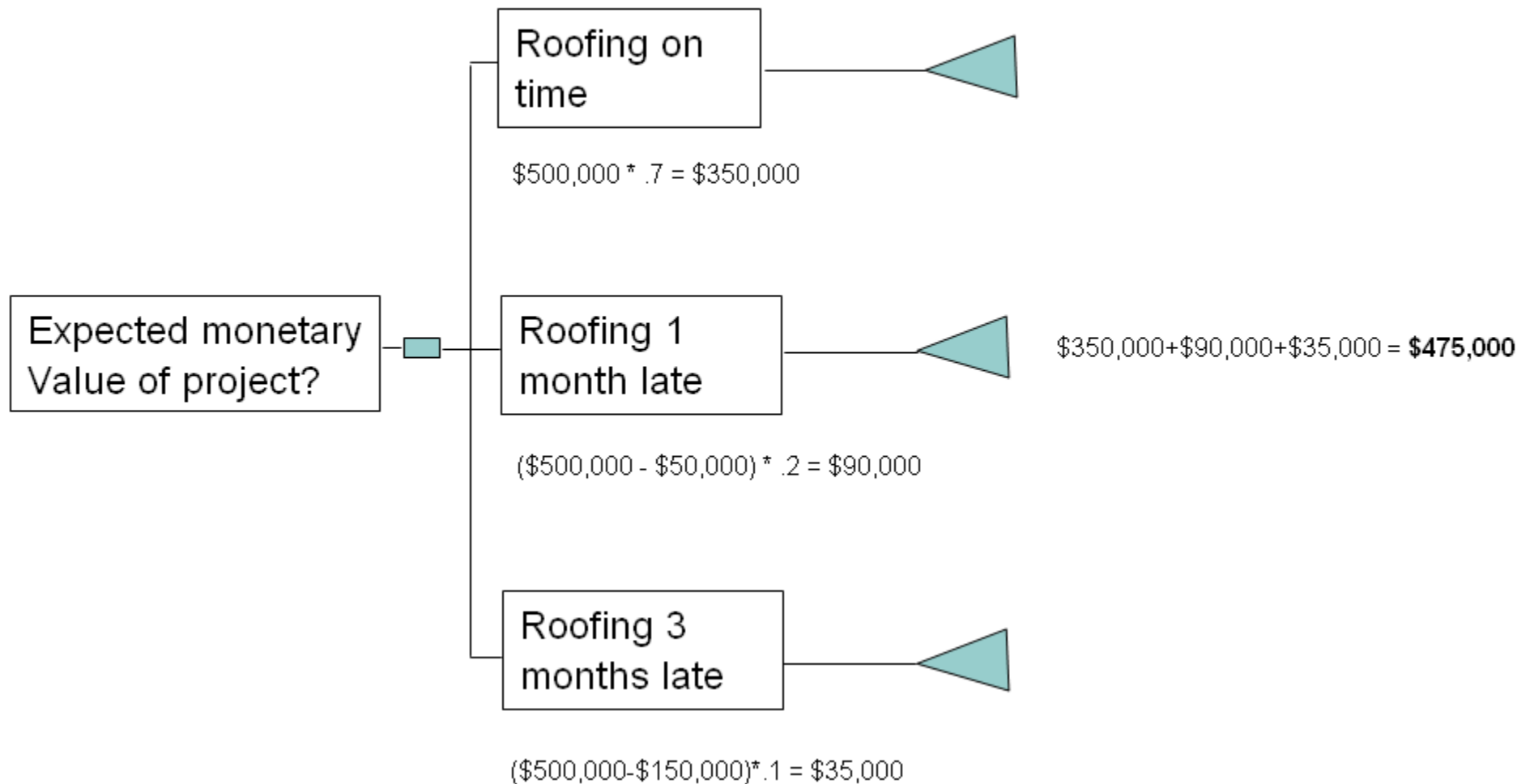
### Option 1



## Option 2



### Option 3



The student should also realize that since all projects are booked at the same margin % the most costly are the most attractive.  
 Revenue = cost + profit margin