Question 1: Cost Benefit Analysis can be done at three different points in time of the life of a project. What are the names of the three different types of analysis and how can each type be used?

Answer 1:

type 1) ex ante (done before a project is begun)- this is useful to help determine resource allocation and to choose between alternative projects or to decide if a project should be done

Type 2) in medias res (done during the life of a project)- this can be updated as new information is gathered on completed parts of the project; can be used to determine if resources need to be shifted or if a project should be terminated

Type 3) ex post (done after a project was completed)- this contains accurate information on how the project was completed; this can be used to learn about the value of a project and whether or not similar projects should be done in the future.

Question 2: You are the new mayor of Los Angeles and are able to choose among 5 revitalization projects. Expected total costs and benefits are given in the table in millions of dollars.

	Costs	Benefits
Museum	70	120
Rail System	300	250
Art Show	200	250
Basketball Team	500	350
City Parks	100	90

- a)Should the museum be built? Should the rail system be built? Show your work.
- b)You have an unlimited budget. Which projects should be undertaken? Why? Show your work.
- c)You now have a \$500m budget. Which projects should be undertaken? Why? Show your work.

Answer 2:

a) Museum: Benefits – Costs = 120 - 70 = 50 Yes, the museum should be built since it has a positive net benefit

Rail System: Benefits – Costs = 250-300 = -50 No, the rail system should not be built since it has a negative net benefit

b) Museum B-C =
$$120-7 = 50$$
 Art show B-C = $250-200 = 50$ Rail System B-C = $250-300 = -50$ Basketball B-C = $350-500 = -150$ City Parks B-C = $90-100 = -10$

The Museum and Art show should be undertaken since they both have positive net benefits.

c) on a 500m budget, I would still undertake the Museum and Art show since they have positive net benefits. The costs for these projects are 70m and 200m = 270m total, which is still under the 500m budget.