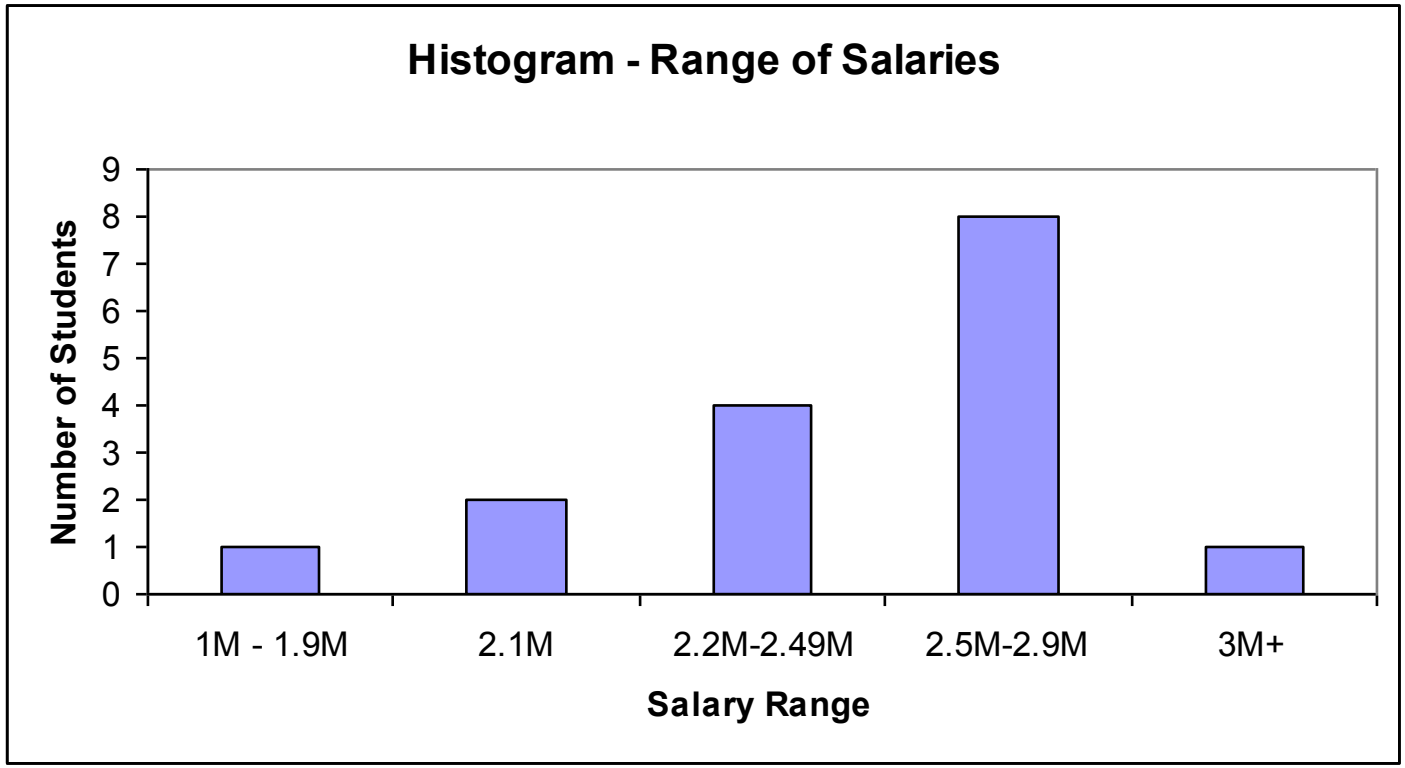
Jessie Jumpshot

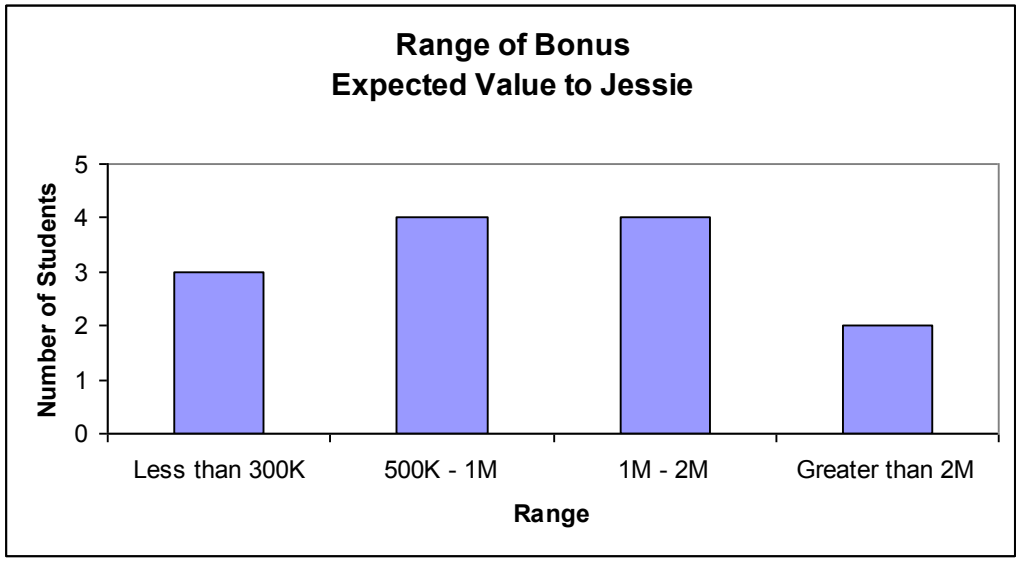
Common Mistakes

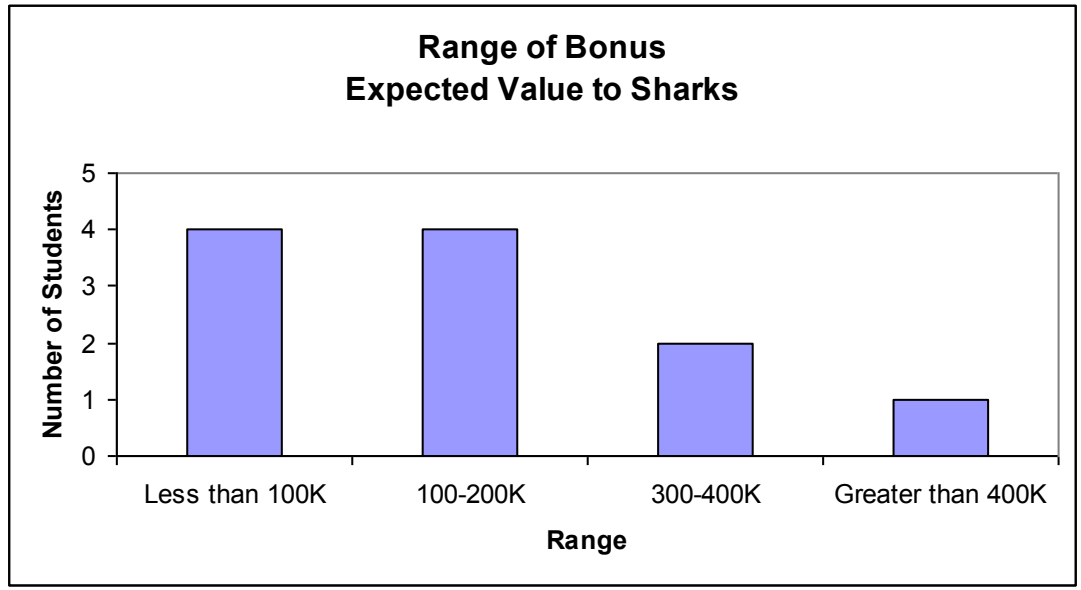
- Forgetting to deduct the agent's salary from Jessie's total package
- Failing to calculate certainty equivalents
  - I.E. $12M*10%ProbabilityWin + $2M*90%ProbabilityLose = CE[Sharks Merchandising Profit] = $3M
  - CE[Sharks:20% merchandizing profit if win] = $1.2M*0.20 = $240,000
  - Where $12M * 10% = $1.2M
- Teammates writing down "different deals"
  - *When differences occurred, I went with the majority*

Histogram of Salary Range

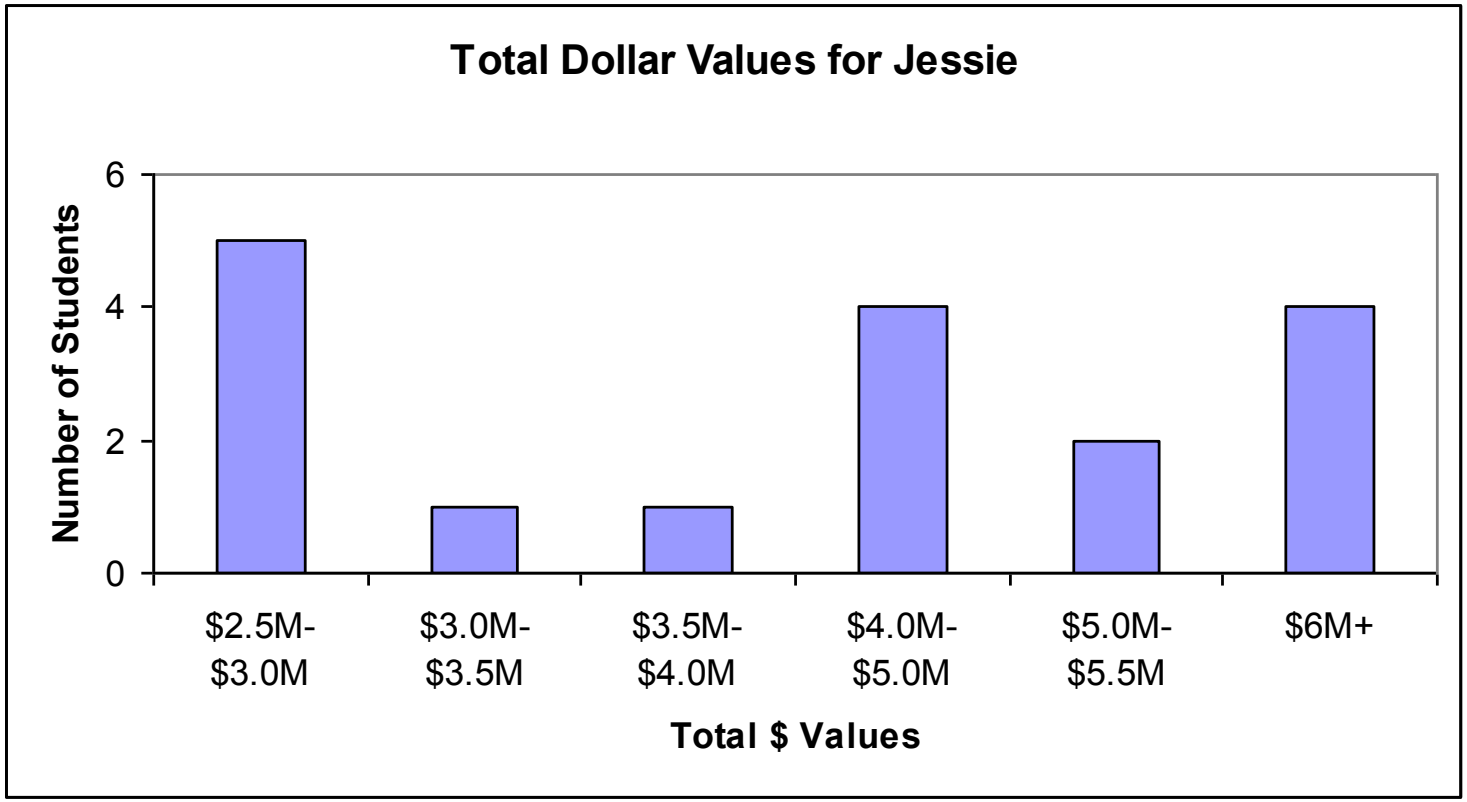


Histogram of Bonus Range

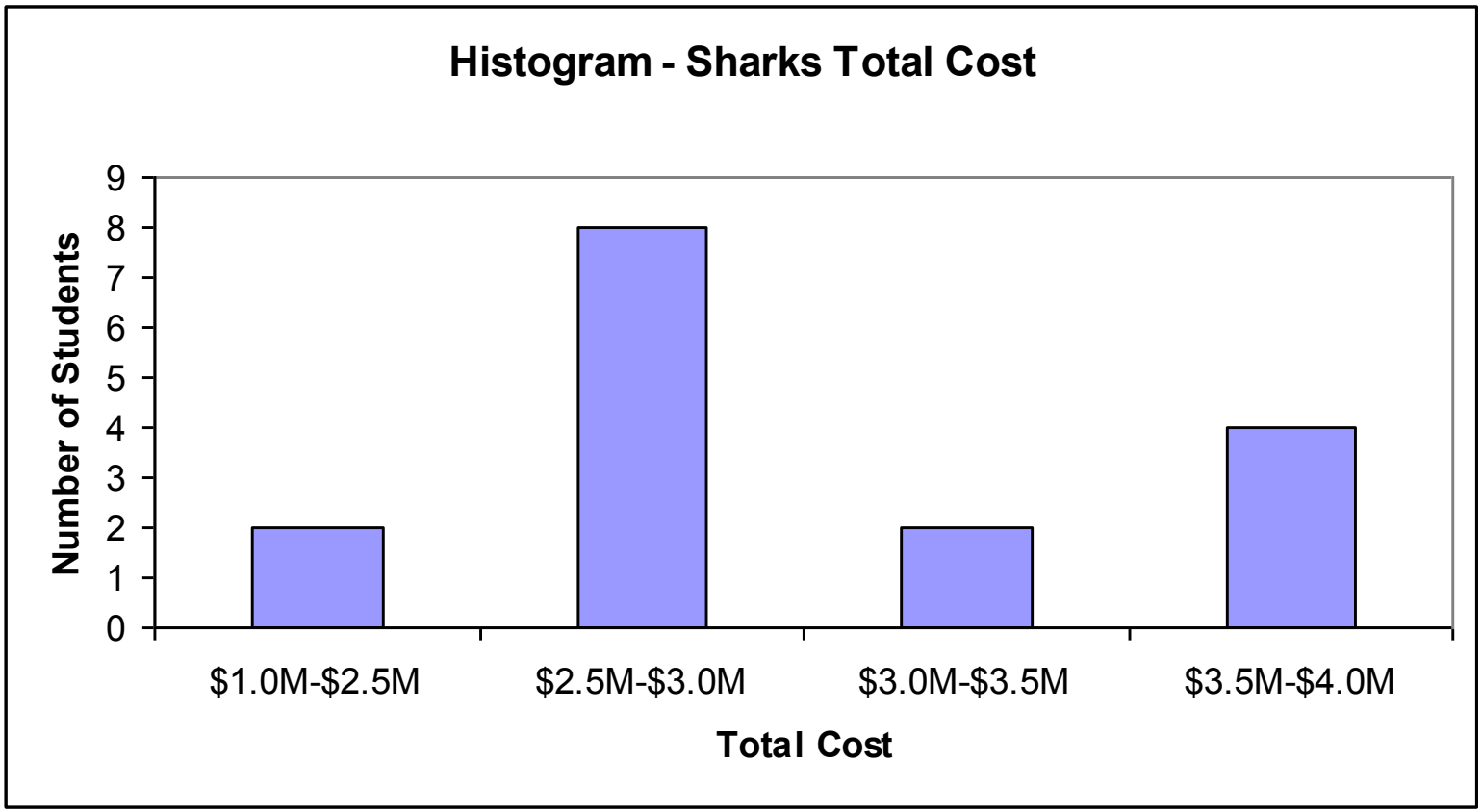




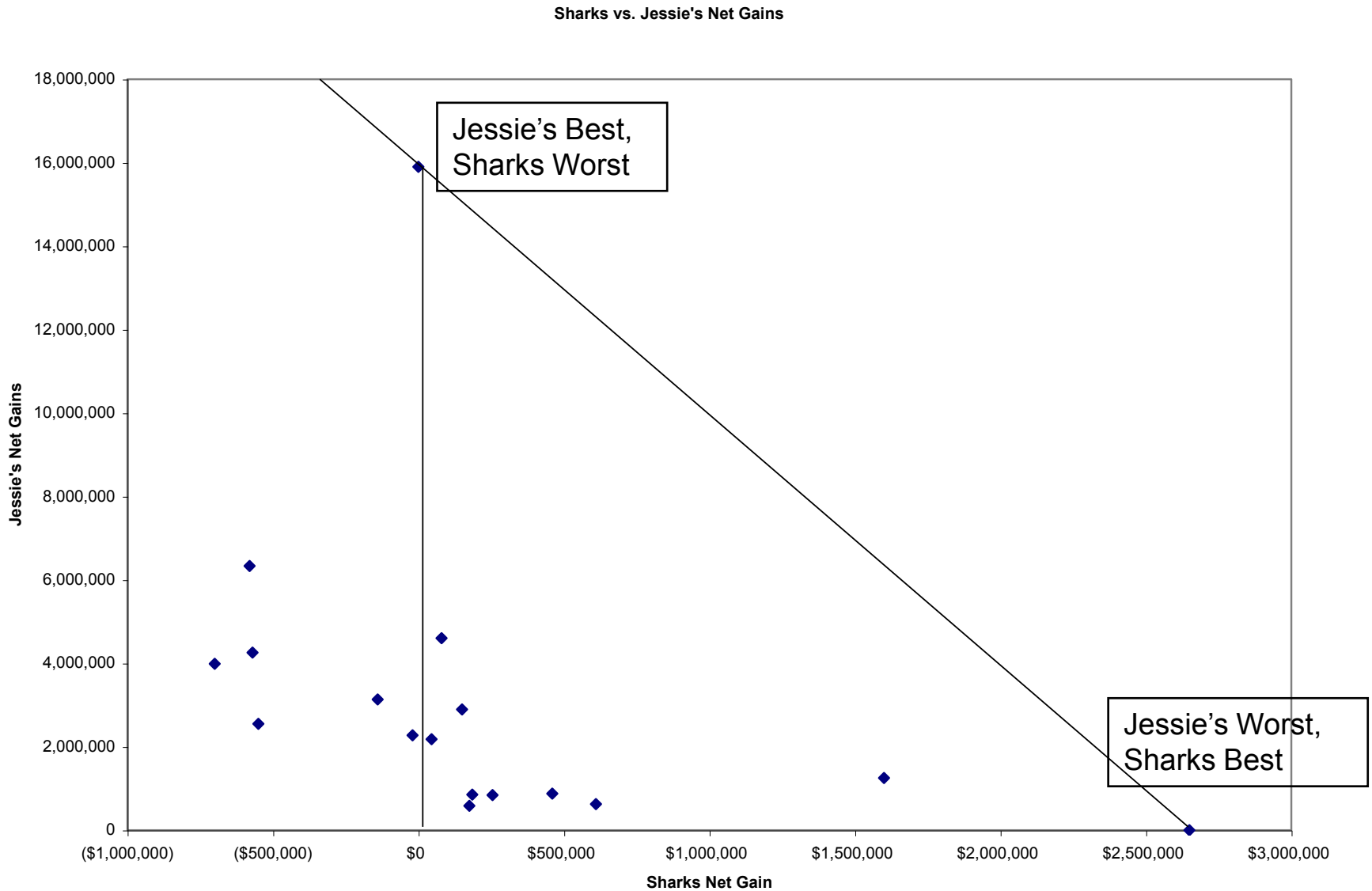
Histogram of Jessie's Total Value



Histogram of Shark's Total Costs



Comparing Jessie vs Shark Net Gains



Jessie Z-Score Calculation

Jessie

Average Net Gain: $2,200,038 Standard Dev: $1,734,676

Jessie's NET GAIN = [(.95)Salary+.6*Win*(Merchandise Profit) +.4*Don't*(Merchandise Profit) + .6*Win*(Bonus) + .4*Don't*(Bonus)] – $2.1M

Jessie's Z-score = ([Jessie' NET GAIN-Avg(Jessie Net Gain)] /([Jessie StDev Net Gain])

Notice: Jessie's Certainty Equivalent assumes she will win 60% of the time and not win 40% of the time

Average Final Agreement: $4,558,866

Agent Z-Score Calculation

Agent

Average Commission: $118,080 Standard Dev: $23,293

Agent's NET GAIN = .05(Salary) – Average Commission

Agent's Z-score = ([Agent's NET GAIN] /([Agent's StDev])

Notice: Agent's Certainty Equivalent is fixed at 5% of Jessie's salary

Sharks Z-Score Calculation

Sharks Manager

Average Net Gain: $58,824 Standard Dev: $543,109

Manager's NET GAIN = $3M - [Salary+.1*Win*(Merchandise Profit) +.9*Don't*(Merchandise Profit) + .1*Win*(Bonus) + .9*Don't*(Bonus)]

Manager's Z-score = ([Manager's' NET GAIN-Avg(Manager Net Gain)] /([Manager StDev])

Notice: Manager's Certainty Equivalent assumes Jessie will win 10% of the time and not win 90% of the time

Average Final Cost: 2,933,333

15.067 Competitive Decision-Making and Negotiation

Spring 2011