



Name: \_\_\_\_\_ Date: \_\_\_\_\_

### “Happy Birthday to You”

Andy has asked his girlfriend to make all the decisions for their date on her birthday. She will pick a restaurant and an activity for the date. Andy will choose a gift for her. The local restaurants include Mexican, Chinese, Seafood, and Italian. The activities she can choose from are Putt-Putt, bowling, and movies. Andy will buy her either candy or flowers.



1. How many outcomes are there for these three decisions? \_\_\_\_\_
2. Draw a tree diagram to illustrate the choices.

Dinner for Two	Activity Cost for Two	Gift Cost
Mexican - \$20	Putt-Putt - \$14	Flowers - \$25
Chinese - \$25	Bowling - \$10	Candy - \$7
Italian - \$15	Movies - \$20	

3. If all the possible outcomes are equally likely, what is the probability that the date will cost at least \$50?
4. What is the maximum cost for the date?
5. What is the minimum cost for the date?
6. To the nearest dollar, what is the average cost for this date?
7. What is the probability that the date costs exactly \$60?
8. What is the probability that the date costs under \$40?