

**Question 1****RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of unit pricing in the context of cost per person. <ul style="list-style-type: none">• Student correctly identifies the cost per person. (1 point)• Student thoroughly explains or shows how to find the cost per person. (2 points)
0	The student's response is mostly or all incorrect.

SAMPLE RESPONSE**Scenario I: Wedding**

Package A: Total Cost: \$6700, Cost Per Person: \$33.50

Package B: Total Cost: \$13200, Cost Per Person: \$66.00

Scenario II: Fundraiser

Package A: Total Cost: \$2,855, Cost Per Person: \$5.71

Package B: Total Cost: \$4,010, Cost Per Person: \$8.02

Scenario III: Conference

Package A: Total Cost: \$31,100, Cost Per Person: \$15.55

Package B: Total Cost: \$36,600, Cost Per Person: \$18.30

Scenario IV: Prom

Package A: Total Cost: \$12,350, Cost Per Person: \$35.29

Package B: Total Cost: \$21,400, Cost Per Person: \$61.14

Question 2**RUBRIC**

Score	Description
4	Response demonstrates thorough understanding of finding the percentage of a quantity. <ul style="list-style-type: none">• Student correctly finds the donor's cost and the client's cost. (2 points)• Student thoroughly explains or shows how to find percentages. (2 points)
0	The student's response is mostly or all incorrect.

SAMPLE RESPONSE**Scenario I: Wedding**

Donor: $\$13,200 \times 0.30 = \$3,960$

Client: $\$13,200 \times 0.70 = \$9,240$

Scenario II: Fundraiser

Donor: $\$4010 \times 0.03 = \$1,203$

Client: $4010 \times 0.70 = \$2,807$

Scenario III: Conference

Donor: $\$36,600 \times 0.03 = \$10,980$

Client: $\$36,600 \times 0.70 = \$25,620$

Scenario IV: Prom

Donor: $\$21,400 \times 0.03 = \$6,420$

Organizer: $21,400 \times 0.70 = \$14,980$

Question 3**RUBRIC**

Score	Description
4	Response demonstrates thorough understanding of finding the percentage of a quantity and unit rates. <ul style="list-style-type: none">• For each part, award 1 point for a correct answer.• For each part, award 1 point for a strategy/explanation.
0	The student's response is mostly or all incorrect.

SAMPLE RESPONSE

New total cost ÷ total number of people = cost per person

Scenario I: Wedding

with Gratuity: $1.05 \times 13,200 = \$13,860$; $13,860 \div 200 = \$69.30$ per person

Scenario II: Fundraiser

with Gratuity: $1.05 \times 4010 = \$4,210.50$; $4,210.50 \div 500 = \text{about } \8.42 per person

Scenario III: Conference

with Gratuity: $1.05 \times 35,600 = \$38,430$; $38,430 \div 2000 = \text{about } \19.22 per person

Scenario IV: Prom

with Gratuity: $1.05 \times 21,400 = \$22,470$; $22,470 \div 350 = \$64.20$ per person

Question 4**RUBRIC**

Score	Description
4	Response demonstrates thorough understanding of finding the percentage of a quantity and unit rates. <ul style="list-style-type: none">• Award 1 point for correct answer.• Award 3 points for correct strategy.
0	The student's response is mostly or all incorrect.

SAMPLE RESPONSE

NOTE: The computations show the costs for Package A. Students may use the costs for package B. The percentages are the same.

Scenario I: Wedding

$$200 - (200 \times 0.20) = 160$$

$$6700 \div 160 = 41.88$$

$$41.88 \div 33.50 = 1.25$$

No. The cost per person will increase by 25%.

Scenario II: Fundraiser

$$500 - (500 \times 0.20) = 400$$

$$2855 \div 400 = 7.14$$

$$7.14 \div 5.71 = 1.25$$

No. The cost per person will increase by 25%.

Scenario III: Conference

$$2000 - (2000 \times 0.20) = 1600$$

$$31,100 \div 1600 = 19.44$$

$$19.44 \div 15.55 = 1.25$$

No. The cost per person will increase by 25%.

Scenario IV: Prom

$$350 - (350 \times 0.20) = 280$$

$$12,350 \div 280 = 44.11$$

$$44.11 \div 35.29 = 1.25$$

No. The cost per person will increase by 25%.

Question 5

RUBRIC

Score	Description
6	Response demonstrates thorough understanding of unit rates and computing simple percentages. Student correctly computes the new cost per person (part a) and the percentage increase (part b). (2 points) Student thoroughly explains or shows how to find each answer. (2 points for each part)
0	The student's response is mostly or all incorrect.

SAMPLE RESPONSE

First, find the cost per person with the increased facility charge.

Next, find the difference between the new cost per person and the old cost per person and determine the percent increase using the following proportion.

Scenario I: Wedding

$$6700 + 100 = 6800 \text{ (new cost of event)}$$

$$6800 \div 200 = 34 \text{ (new cost per person)}$$

$$33.50 - 34 = 0.50 \text{ (increase in cost per person)}$$

$$0.50 \div 33.50 = 0.0149 \text{ (percent increase)}$$

Increase is \$0.50 per person, 1.5% increase

Scenario II: Fundraiser

$$2855 + 100 = 2955 \text{ (new cost of event)}$$

$$2955 \div 500 = 5.91 \text{ (new cost per person)}$$

$$5.91 - 5.71 = 0.20 \text{ (increase in cost per person)}$$

$$0.20 \div 5.71 = 0.035 \text{ (percent increase)}$$

Increase is \$0.20 per person, 3.5% increase

Scenario III: Conference

$$31,100 + 200 = 31,300 \text{ (new cost of event)}$$

$$31,300 \div 2000 = 15.65 \text{ (new cost per person)}$$

$$15.65 - 15.55 = 0.10 \text{ (increase in cost per person)}$$

$$0.10 \div 15.55 = 0.006 \text{ (percent increase)}$$

Increase \$0.10 per person, 0.6% increase

Scenario IV: Prom

$$12,350 + 100 = 12,450 \text{ (new cost of event)}$$

$$12,450 \div 350 = 35.57 \text{ (new cost per person)}$$

$$35.57 - 35.29 = 0.28 \text{ (increase in cost per person)}$$

$$0.28 \div 35.29 = 0.0079 \text{ (percent increase)}$$

Increase about \$0.29 per person, 0.8% increase

Question 6**RUBRIC**

Score	Description
3	Response demonstrates thorough understanding of unit rates. <ul style="list-style-type: none">• Student correctly finds the cost per person. (1 points)• Student thoroughly explains the impact of increasing the number of attendees by 50. (2 points)
0	Student does not address this question. He or she does not make an attempt to solve the problem.

SAMPLE RESPONSE**Scenario I: Wedding**

, which is \$1.50 less per person

Scenario II: Fundraiser

, which is \$0.08 less per person

Scenario III: Conference

, which is \$0.22 less per person

Scenario IV: Prom

, which is \$0.51 less per person