

**CCSS
7.EE.1**

Expense Report

A company pays for x employees to attend a conference for two days and two nights. Initial costs are shown in the table.

Conference registration	\$80 per person
Hotel	\$279.98 per person
Exhibit Booth	\$1000

The company reimburses the employees who attended the conference for certain expenses they had on the trip, as shown in the table below.

Food	\$75 per person
Additional Allowance	\$100 per person
Personal Vehicle Use	\$0.50 per mile m
Gasoline	\$62.36

1. Write and simplify an expression that represents the total amount of the initial costs. Find the total amount of the initial costs when 3 employees attend the conference.
2. Write and simplify an expression that represents the total amount of the reimbursements. Find the total amount of the reimbursements when the 3 employees drove 1 personal vehicle 364 miles.
3. Which cost is greater for the company, the initial costs or the reimbursements? by how much? Justify your answer by writing and evaluating an expression for the difference between the initial costs and reimbursements.

**CCSS
7.EE.1****Common Core State Standard**

- 7.EE.1** Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.

**CCSS
7.EE.1****Grading Rubric**

Answers	Score
1. $80x + 279.98x + 1000 = 359.98x + 1000$; \$2079.94	2
2. $75x + 100x + 0.5m + 62.36 = 175x + 0.5m + 62.36$; \$769.36	2
3. initial cost; \$1310.58; $184.98x - 0.5m + 937.64$; $184.98(3) - 0.5(364) + 937.64 = 1310.58$	4
Precision	
1. Student uses the information in the table and the variable x to write and simplify an expression. Student substitutes for the variable and evaluates.	2
2. Student uses the information in the table and the variables x and m to write and simplify an expression. Student substitutes for the variables and evaluates.	2
3. Student subtracts the answers in Exercises 1 and 2. Student justifies the result by finding the difference of the expressions and substituting for the variables.	3
Total Points	15