Task Title: School BBQ Table Calculations

OALCF Cover Sheet – Practitioner Copy

Learner Name: _____

Date Started: _____

Date Completed: _____

Successful Completion: Yes ☐ No ☐

Goal Path: Employment ☐ Apprenticeship ☐

Secondary School ☐ Post Secondary ☐ Independence ☐

Task Description: The learner will calculate the number of tables and tablecloths required for an event.

Main Competency/Task Group/Level Indicator:

- Find and Use Information/Read continuous text/A1.1
- Understand and Use Numbers/Manage money/C1.1
- Understand and Use Numbers/Use measures/C3.1

Materials Required:

- Pen/pencil and paper and/or digital device
- Calculator or digital device with calculator function (optional)

Learner Information

At many elementary schools, Parent Councils and School Staff co-host a Parent-Teacher BBQ at the beginning of each school year (September) to encourage positive relationships and communication. As a volunteer on the Parent Council, a person may be in charge of making sure that there are enough tables for the food buffet and for people to sit down to eat. That person may also need to buy plastic tablecloths to cover the tables.

Read the "Parent-Teacher BBQ Scenario".

Parent-Teacher BBQ Scenario

You are the Parent Volunteer in charge of the tables and tablecloths. Each table is six feet long and 32 inches wide. Three people can sit on each side of one table. Four tables are put together end to end to make one row. There needs to be seating for 80 people. The buffet needs five tables to spread out all the food. Plastic tablecloths in the school colours, gold and green, need to be purchased to cover all tables. Each tablecloth is $2.99 plus tax and measures 70 x 108 inches. Volunteers will be paid back for any purchases they have to make for the BBQ.

Work Sheet

Task 1: Calculate the length of one row of four tables set end to end length-wise.

Answer:

Task 2: How many people can sit at one row of four tables with one person sitting on each end?

Answer:

Task 3: Calculate the length of the buffet.

Answer:

Task 4: How many tables will be needed to ensure that there is seating for 80 people?

Answer:

Task 5: How many tablecloths does a volunteer have to buy to cover the buffet tables and the tables for eating?

Answer:

Task 6: What is the before tax cost of the total number of tablecloths?

Answer:

Answers

Task 1: Calculate the length of one row of four tables set end to end length-wise.

Answer: 24 feet. 6 feet (length per table) x 4 people = 24 feet

Task 2: How many people can sit at one row of four tables with one person sitting on each end?

Answer: 26 people

One option:
3 people can sit on one side of a 6 foot table. 6 / 3 = 2 feet per person
Each row is 24 feet long. Each row has 2 sides. 24 feet x 2 = 48 feet
48 feet / 2 feet per person = 24 people sitting on both sides of the row + 1 at each end = 26

Another option:
Each row is 24 feet long. 24 feet / 2 feet per person = 12 people.
12 people per side x 2 sides = 24 people sitting on both sides of one row of tables. One person per end. 1 person x 2 ends = 2 people
24 people on the sides + 2 people on the ends = 26 people at one row of tables

Task 3: Calculate the length of the buffet.

Answer: 30 feet. 5 tables x 6 feet = 30 feet

Task 4: How many tables will be needed to ensure that there is seating for 80 people?

Answer: Decide that People = Seats

80 seats / 26 seats per row = 3.077 rows
4 tables per row. 4 tables x 3 rows = 12 tables
3 rows x 26 seats = 78 seats
80 seats – 78 seats (3 rows) = 2 seats (still needed)
Decide that 2 seats can be provided at one table.
12 tables + 1 table = 13 tables (80 seats)

Task 5: How many tablecloths does a volunteer have to buy to cover the buffet tables and the tables for eating?

Answer: 13 tablecloths.

Convert the length of one tablecloth into feet. (Based on the fact that there are 12 inches in one foot.)
108 inches divided by 12 inches = 9 feet (length of one tablecloth)
Buffet Table is 30 feet long (Task 3).
30 feet divided by 9 feet (length per tablecloth) = 3.333.
Decide that 4 tablecloths need to be purchased to completely cover the buffet table.
13 tables are needed for seating.
13 tables x 6 feet (length per table) = 78 feet
78 feet divided by 9 feet (length per tablecloth) = 8.666
Decide that 9 tablecloths need to be purchased to completely cover all the tables.
9 tablecloths (seating) + 4 tablecloths (buffet) = 13 tablecloths in total

Task 6: What is the before tax cost of the total number of tablecloths?

Answer: $38.87. 13 tablecloths x $2.99 each = $38.87

Performance Descriptors

Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
A1.1	reads short texts to locate a single piece of information			
	decodes words and makes meaning of sentences in a single text			
	follows the sequence of events in straightforward chronological texts			
	follow simple, straightforward instructional texts			
	identifies the main idea in brief texts			
C1.1	adds, subtract, multiplies and divides whole numbers and decimals			
	identifies and performs required operation			
	follows apparent steps to reach solutions			
	interprets and represents costs using monetary symbols and decimals			
	uses strategies to check accuracy (e.g. estimating, using a			

Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
	calculator, repeating a calculation, using the reverse operation)			
C3.1	adds, subtracts whole numbers measurements			
	recognizes values in number and word format			
	understands numerical order			
	makes simple estimates			
	chooses appropriate units			
	identifies and performs required operation			
	interprets and represents measures using whole numbers, decimals and simple, common fractions			
	follows apparent steps to reach solutions			
	rounds to the nearest whole unit			
	uses strategies to check accuracy			

This task: Was successfully completed ☐ Needs to be tried again ☐

Learner Comments:

Instructor (print): _____

Learner (print): _____