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# **Finance - Exchange Rates**

# Introduction:

Fred Nappa is planning to take a wine-tasting tour through Italy this summer. The total cost consists of various components denominated in both euros (€) and dollars (\$). The tasks include determining the total dollar cost of the trip and converting certain expenses from dollars to euros using the given exchange rate.

#### **Given Data:**

Tour cost: €2,750

Round-trip airfare from North Carolina to Rome: \$1,487

Incidental travel expenses: \$300

Cost of meals in Italy: €513

Additional money for miscellaneous expenditures: \$1,060

Exchange rate: \$1.3455/€1.00

# a. Determining the total dollar cost of the trip to Italy:

# Step 1: Converting the tour cost from euros to dollars

- Formula:

Cost in Dollars = Cost in Euros × Exchange Rate

- Calculation:

Cost of tour in dollars = €2,750 × \$1.3455/€1

Cost of tour in dollars = \$3,700.125

Explanation: The cost of the tour in euros is converted to dollars using the given exchange rate.

# Step 2: Adding other expenses in dollars

- Components:

Round-trip airfare: \$1,487

Incidental travel expenses: \$300

Miscellaneous expenditures: \$1,060

- Calculation:

Total other expenses in dollars = \$1,487 + \$300 + \$1,060 = \$2,847

Explanation: Summing up all additional expenses given in dollars.

### Step 3: Calculations for total costs in dollars

- Total dollar cost:

Total dollar cost = Cost of tour in dollars + Total additional expenses

Total dollar cost = \$3,700.125 + \$2,847

Total dollar cost = \$6,547.125

Explanation: The total cost in dollars includes the converted tour cost and all other expenses in dollars.

# b. Determining the amount of euros (€) Fred will need to cover meals and miscellaneous expenditures:

# Step 4: Calculating total expenditure in euros

- Components:

Cost of meals in euros: €513

Convert miscellaneous expenditures to euros

- Formula for converting dollars to euros:

Cost in Euros = Cost in Dollars / Exchange Rate

- Calculation:

Miscellaneous expenditures in euros = \$1,060 / \$1.3455

Miscellaneous expenditures in euros = €787.54

Explanation: Converting the miscellaneous expenditures from dollars to euros using the exchange rate provided.

#### Step 5: Adding total expenditures in euros

- Total euro amount required:

Total euros needed = Cost of meals + Miscellaneous expenditures in euros

Total euros needed = €513 + €787.54

Total euros needed = €1,300.54

Explanation: Adding cost of meals and converted miscellaneous expenditures to obtain the total euros needed.

# **Final Solutions:**

a. Total dollar cost of the trip to Italy: \$6,547.125

b. Amount of euros Fred will need: €1,300.54