



Task Title: Plumber Material Requirements

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 perform math calculation tasks related to a plumbing project.

Main Competency/Task Group/Level Indicator:

- Find and Use Information/Read continuous text/A1.2
- Understand and Use Numbers/Use measures/C3.1

Materials Required:

- Pen/pencil and paper
- Calculator is optional

Learner Information

Plumbers work on projects that require many different materials, such as pipes. They are required to calculate the total materials needed to complete a job.

Work Sheet

**Task 1: A plumber is installing a 12-metre water line in a house.
Calculate the number of 3-metre pipes needed for the job.**

Answer:

**Task 2: A project requires connecting six pieces of 2-metre pipe.
Calculate the number of couplings needed if each connection
requires one coupling.**

Answer:

**Task 3: A plumber is installing water shut-off valves for 4 sinks. Each
sink needs a hot and cold shut-off. Calculate the total shut-
off valves needed.**

Answer:

**Task 4: A plumber needs to install water pipes for a bathroom. Use
the following to calculate the total length of pipe required.**

- Toilet: 1.5 metres
- Sink: 2 metres
- Shower: 3 metres

Answer:

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Task 5: A plumber is running pipe through a house. Calculate the number of 90-degree elbows needed if the pipe changes direction at five different corners.

Answer:

Answers

Task 1: A plumber is installing a 12-metre water line in a house. Calculate the number of 3-metre pipes needed for the job.

Answer: $3 \times 4 = 12$ 4 pipes are needed

Task 2: A project requires connecting six pieces of 2-metre pipe. Calculate the number of couplings needed if each connection requires one coupling.

Answer: 5 couplings

Task 3: A plumber is installing water shut-off valves for 4 sinks. Each sink needs a hot and cold shut-off. Calculate the total shut-off valves needed.

Answer: $4 \times 2 = 8$ 8 shut-off valves are needed

Task 4: A plumber needs to install water pipes for a bathroom. Use the following to calculate the total length of pipe required.

- Toilet: 1.5 metres
- Sink: 2 metres
- Shower: 3 metres

Answer: $1.5\text{m} + 2\text{m} + 3\text{m} = 6.5\text{ m}$ 6.5 metres of pipe are needed

Task 5: A plumber is running pipe through a house. Calculate the number of 90-degree elbows needed if the pipe changes direction at five different corners.

Answer: 5 elbows – one per corner

Performance Descriptors

Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
A1.2	Scans text to locate information			
	Locates multiple pieces of information in simple texts			
C3.1	Adds and subtracts whole number measurements			
	Identifies and performs required operation			
	Interprets and represents measures using whole numbers, decimals, and simple, common fractions (e.g. $\frac{1}{2}$, $\frac{1}{4}$)			
	Follows apparent steps to reach solutions			

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

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Learner Comments:

Instructor (print):

Learner (print):