Task Title: Understanding Calculations in Carpentry

OALCF Cover Sheet – Learner 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 make calculations based on carpentry task information.

Main Competency/Task Group/Level Indicator:

- Understand and Use Numbers/Use measures/C3.2

Materials Required:

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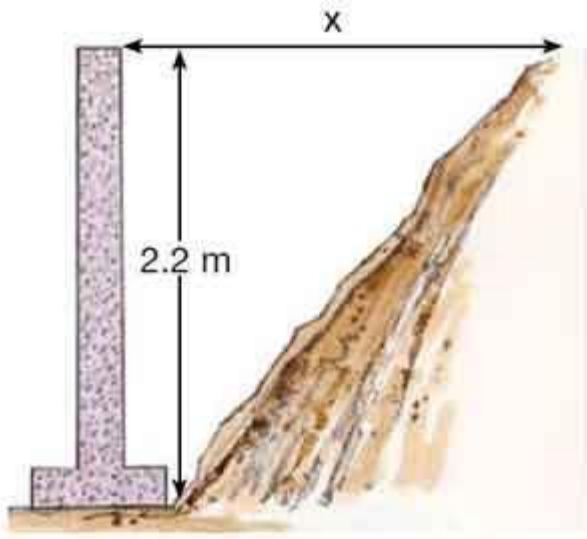- Calculator or digital device with calculator function

Learner Information

Carpenters make many calculations including determining where structures can be built, or calculating the quantities of materials that are needed.
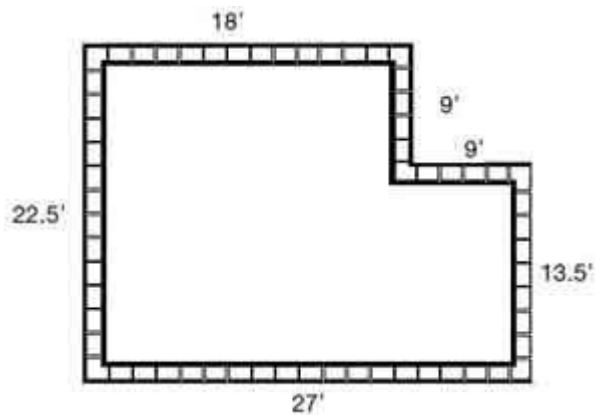
Worksheet

Task 1: Deep excavations need sloping sides to keep loose material from sliding onto anyone working below. There needs to be a 3:4 ratio between the setback (x) and the depth of the excavation.

Calculate the setback needed for a house with a basement that requires an excavation 2.2 m deep. Round your answer to the nearest tenth.

Answer:

_____

Task 2: Cleats need to be placed every three feet. Two stakes are needed for each cleat. One additional stake is placed in each corner. Calculate the number of cleats and stakes needed to build footing ladders for the foundation shown below.

Answer:

_____

Task 3: Cleats are purchased in bundles of 5. Stakes are purchased in bundles of 12. Calculate the number of bundles of each that are needed for this project. You cannot purchase partial bundles.

Answer:

_____