

Program: Carpentry

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Lesson Title- Board feet

Terminal Objective- Upon completion of this lesson, the student will be able to calculate the amount of lumber needed to construct any piece of furniture or project wanted. The knowledge will be demonstrated by correctly performing the assignments and by scoring a minimum of 85% on the assignment.

Enabling Objective-

1. The student will list all rules and definitions to the mathematical equations.
2. The student will be able to calculate the equations to figure the correct amount of material needed for the completion of job.

Related PA math standards:

- #2.2.11.A
- #2.2.11.E
- #2.3.11.C
- #2.4.11.E

Introduction:

1. Everyone in this class will at one time or another probably wants to build some type of furniture or other decoration. In order to buy the proper amount of wood and know how we've been charged, becomes very important knowledge.

Body / main content:

I. One board foot (1) = 144 cubic inches

A. Cubic inch = 1" x 1" x 1"

II. Equation for computing board feet.

- A. $BF = \text{Thickness}'' \times \text{Width}'' \times \text{Length}'$
Ex. - 1" Thick x 12" wide x 10' long
- B. $BF = \text{Thickness}'' \times \text{width}'' \times \text{Length}'$

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Ex. - 1" x 3" x 12'