



CARPENTERS TRAINING INSTITUTE

Preparing for the Apprentice Test

What you need to know

1. Addition: whole numbers, decimals
Subtraction: whole numbers, decimals, fractions
Multiplication: whole numbers, decimals, fractions
Division: whole numbers, decimals, fractions
2. Able to find percentages
3. Reduce fractions to lowest terms
4. Add, subtract, multiply, and divide feet and inches
5. Convert decimals to fractions / fractions to decimals
6. Convert fractions of a foot to inches
7. Read a ruler
8. Know the formula of:
 - Area of triangle, rectangle, circle, cylinder, and parallelogram
 - Volume of a cylinder, cube, and rectangle solid
 - Hypotenuse of a right angle
 - Altitude of a right angle
9. Find degrees in angles
10. Find square root
11. Find perimeter

Schedule to take the FREE Apprentice Test –

1. Call your nearest Training Center (listed below) to schedule test date and time
2. A calculator and this formula guide are allowed during the test. No phones allowed.
3. Bring a copy of your high school diploma/GED/HSED/ or high school transcript
4. A copy of your valid driver's license will be taken when you arrive to take the test

Formula Guide

Area	Formula	Triangle	Formula
Area of a triangle	$\frac{\text{base} \times \text{height}}{2}$	Hypotenuse of a right triangle Altitude of a right triangle	square root of $a^2 + b^2$ square root of $c^2 - b^2$
Area of a rectangle	length x width	Base of a right triangle	square root of $c^2 - a^2$
Area of a circle	$\pi \times \text{radius squared}$		
Circular area of cylinder	$\pi \times \text{diameter} \times \text{height}$		
Area of a parallelogram	base x height		
Area of a square	side x side		
Area of an octagon	$4.8284 \times S^2$	π (PI) = 3.1416 or 22/7	
Volume	Formula		
Volume of a cylinder	$\pi \times \text{radius squared} \times \text{height}$	Circumference of a circle	diameter x π
Volume of a cube	side x side x side or S^3	Diameter	radius x 2
Volume of a rectangle solid	length x width x height		

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N2218 Bodde Road
(920) 766-1515

Madison Training Center
5202 Monument Lane
(608) 241-0960

Rothschild Training Center
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