## Displacement Conversion Converting Engine Displacement

## Engine Displacement Conversion <br> $\checkmark$ Cubic Centimeters (cc's) are standard for motorcycles

$\checkmark$ Cubic Inches is standard for American made car's
$\checkmark$ Liters is standard for import cars.
To convert engine displacement remember three mathmatical facts.
First: $2.54 \mathrm{~cm}=1$ inch
Second: $2.54^{3}=16.387064=((2.54 \times 2.54) \times 2.54)$
Third: 1 liter $=1,000$ cubic centimeters.

## Formulas:

(cubic inches) $\times 16.387064=($ cubic centimeters $)$ (cubic centimeters) / $16.387064=$ (cubic inches) (cubic centimeters) $/ 1,000=$ (liters)


## Example 1:

If 2.54 centimeters is 1 inch, then $2.54^{3}=16.387064$ cubic centimeters is 1 cubic inch. Hence 904 cubic centimeters is $904 / 16.387064=55.16546466163799$ cubic inches.
Since 1,000 cubic centimeters is 1 liter; 904 cubic centimeters is .904 liters.
So a "Ducati 904 Engine" is equivalent to 55 cubic inches or .9 liter.

## Example 2:

If 1 inch is 2.54 centimeters, then 1 cubic inch is $2.54^{3}=16.387064$ cubic centimeters.
Hence 308 cubic inches is $350 \times 16.387064=5,047.215711999999$ cubic centimeters.
Since 1,000 cubic centimeters is 1 liter; 5,047.215711999999 cubic centimeters is 5.047215711999999 liters. So a "Chevy 308 Engine" is equivalent to 5,047 cubic centimeters or 5 liters.

## Example 3:

If 2.54 centimeters is 1 inch, then $2.54^{3}=16.387064$ cubic centimeters is 1 cubic inch.
Since 1,000 cubic centimeters is 1 liter; 5.5 liter is 5,500 cubic centimeters.
Hence 5,500 cubic centimeters is 5,500 / $16.387064=335.6305925210276$ cubic inches.
So a "Mercedes SLK55 Roadster 5.5 Liter" is equivalent to 335 cubic inches or 5,500 cubic centimeters.

