## Mechanical Springs

Shigley Chapter §10

Machine Design B344 2023



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**Springs** 

Blocks Colours Lists Math



### **Springs**

Blocks Colours Lists Math

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#### **Blocks**



Colours

Math

### **Springs**

General block

A general block ...

### **Alert block**

An alert block ...

### Example block

An example ...

### Theorem (Theorem block)

A theorem ...

### **STB Colours**



## **Springs**

Blocks Colours

Math

Color name	RGB
stbMaroon	( 97, 34, 59)
stbGold	(183, 153, 98)
stbGreen	(130, 204, 174)
stbOrange	(220, 68, 5)
stbWine	(166, 10, 61)
stbSoil	(100, 51, 53)

#### Lists

**Itemize** 



### **Springs**

Blocks Colours

Lists

Blocks

### **Enumerate**

...

First item

First item

Second item

- Second item
- **③** ...

### Description

First item ...

Second item ...

... ...

### Math



### **Springs**

Blocks Colours Lists Math

#### **Residue Theorem**

Let f be analytic in the region G except for the isolated singularities  $a_1, a_2, \ldots, a_m$ . If  $\gamma$  is a closed rectifiable curve in G which does not pass through any of the points  $a_k$  and if  $\gamma \approx 0$  in G then

$$\frac{1}{2\pi i} \int_{\gamma} f = \sum_{k=1}^{m} n(\gamma; a_k) \operatorname{Res}(f; a_k).$$

Another nice theorem from complex analysis is

#### **Maximum Modulus**

Let G be a bounded open set in  $\mathbb C$  and suppose that f is a continuous function on  $G^-$  which is analytic in G. Then

$$\max\{|f(z)|:z\in G^-\}=\max\{|f(z)|:z\in\partial G\}.$$

# Thank you

