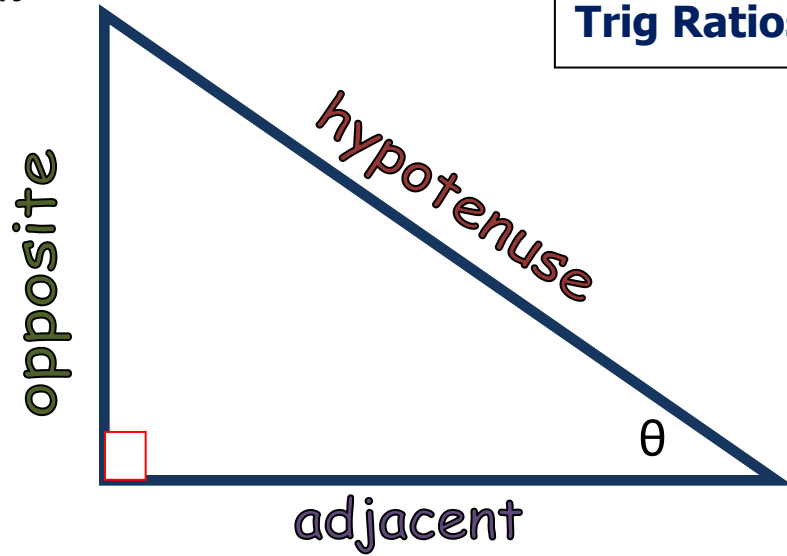


Unit 9

Trig Ratios

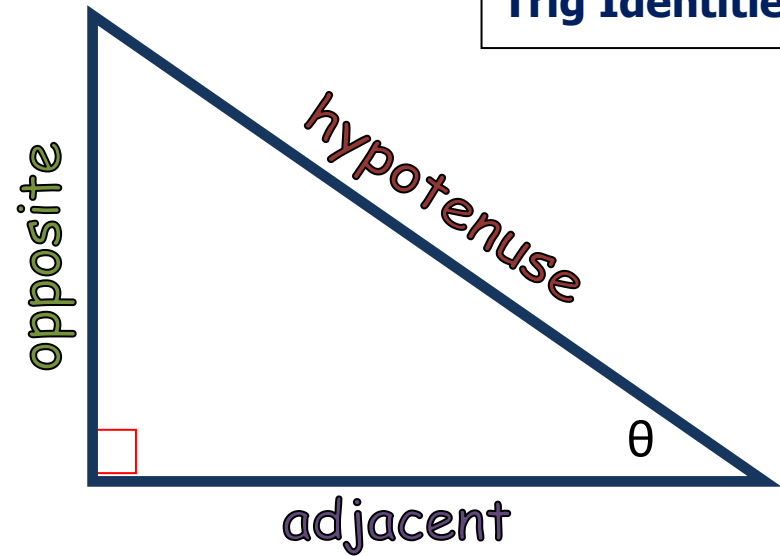


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Unit 9

Trig Identities

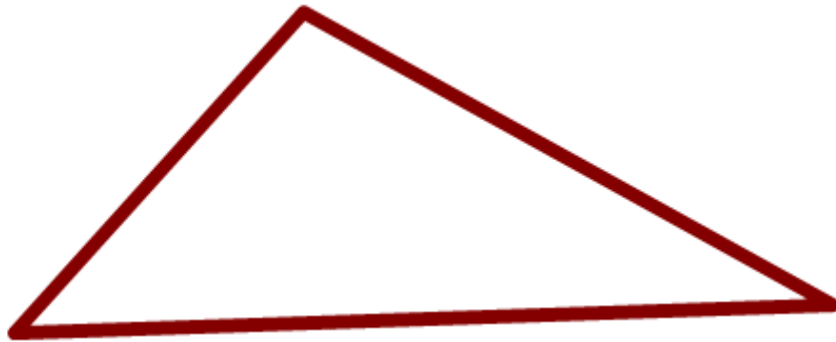


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Unit 9

Oblique Triangle

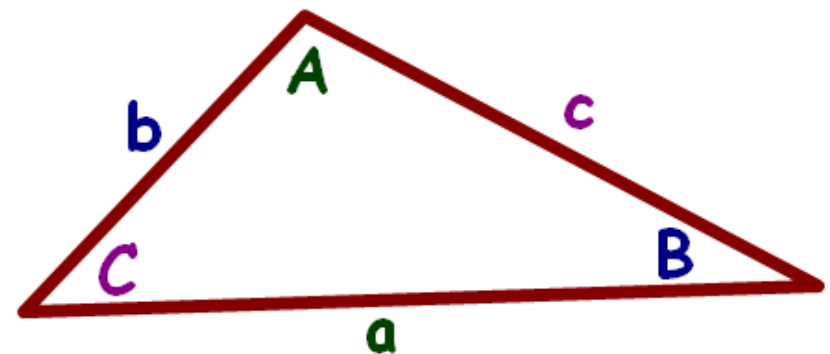


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Unit 9

Law of Sines



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Identities

- $\tan \theta = \sin \theta / \cos \theta$
- $(\sin \theta)^2 + (\cos \theta)^2 = 1$

Trigonometry Ratios

- $\sin \theta = \text{opposite/hypotenuse}$
- $\cos \theta = \text{adjacent/hypotenuse}$
- $\tan \theta = \text{opposite/adjacent}$

SOHCAHTOA**Law of Sines**

- Two angles and one side
- Two sides and an angle opposite one of the sides

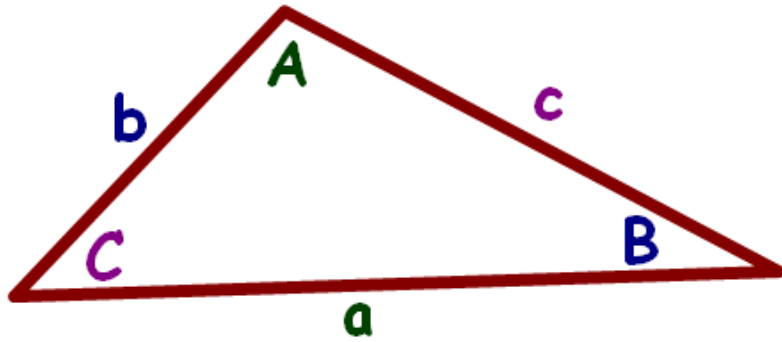
$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

Oblique

- A triangle with one obtuse angle

Unit 7

Law of Cosines

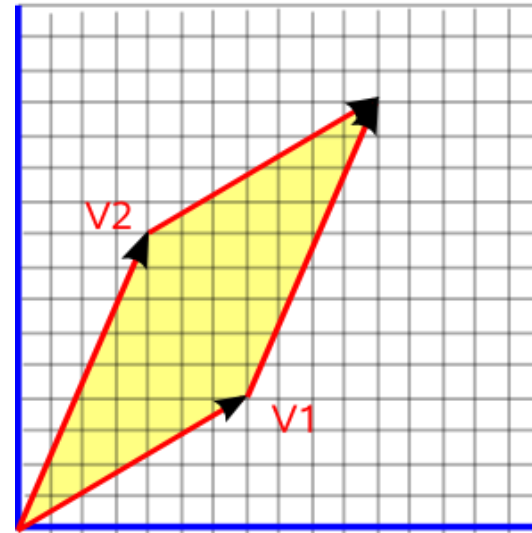


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Unit 7

Vector



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Unit 7

Unit 7

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Vector

- Math object that has a numerical value (magnitude) and a direction
- Represented by an arrow with a letter

Law of Cosines

- Two sides and the included angle
- Three sides

$$a^2 = b^2 + c^2 - 2bc(\cos A)$$

$$b^2 = a^2 + c^2 - 2ac(\cos B)$$

$$c^2 = a^2 + b^2 - 2ab(\cos C)$$