**CÁC HỆ THỨC LƯỢNG TRONG TAM GIÁC**

**I. Hệ thức lượng trong tam giác vuông**: Cho ∆ABC vuông ở A, ta có :  
 1.   
 2.    
 3.   
 4. với AH là đường cao.5.   
 6.  *với AM là đường trung tuyến của canh BC.*

H

C

B

A

**II. Hệ thức lượng trong tam giác thường**

**1.Định lý Côsin***. Trong tam giác ABC bất kì với BC = a, CA = b, AB = c, ta có:* 1.   
 2.   
 3. 

❖ **Tính độ dài đường trung tuyến của tam giác**:

Gọi lần lượt là độ dài các trung tuyến vẽ từ đỉnh A, B và C của tam giác, ta có:  
   

**2. Định lí Sin:** Gọi R là bán kính đường tròn ngoại tiếp tam giác, ta có:



**3. Công thức tính diện tích tam giác:** Gọi lần lượt là độ dài các đường cao vẽ từ đỉnh A, B, C và S là diện tích của tam giác, r là bán kính đường tròn nội tiếp, , ta có:  
  
  
  
  


**GIẢI TAM GIÁC**

(Tính các cạnh, các góc, diện tích, các đường cao, các đường trung tuyến, bán kính đường tròn ngoại tiếp và đường tròn nội tiếp của tam giác)

1. Cho tam giác ABC biết c = 35 cm, góc A = 400, góc C = 1200.

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1. Giải tam giác ABC biết góc A = 600, góc B = 400, c = 14

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1. Cho tam giác ABC biết a = 7 cm, b = 23 cm, góc C = 1300.

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1. Cho tam giác ABC biết b = 14, c = 10 góc A = 1450.

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1. Cho tam giác ABC biết a = 4 cm, b = 5 cm, c = 7 cm .

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1. Giải tam giác ABC biết a = 14, b = 18, c = 20

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