

**Nama: Revalin Azzahra**

**Kelas: XI RPL 2**

No. \_\_\_\_\_

Date: \_\_\_\_\_

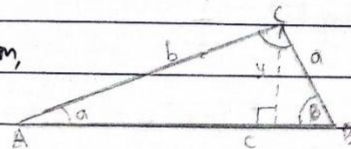
1. Diketahui segitiga ABC  $a = 15\text{cm}$ ,  $b = 20\text{cm}$  dan sudut  $B = 60^\circ$ .  
☐ Hitunglah sudut  $\alpha$ , sudut  $\gamma$  dan panjang  $c$ ? (dgn menggunakan aturan sinus)

2. Perhatikan gambar berikut!

- ☐ Dari gambar disamping diketahui  $a = 20\text{cm}$ ,

- ☐  $b = 30\text{cm}$  dan sudut  $\gamma = 30^\circ$ . Hitunglah

- ☐ panjang AB? (dgn aturan cosinus)

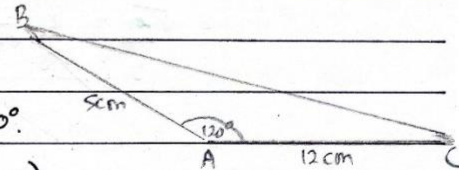


3. Hitunglah luas segitiga ABC, jika diketahui  $a = 4\text{cm}$ ,  $c = 3\text{cm}$  dan sudut  $B = 60^\circ$

4. Diketahui  $\triangle ABC$  mempunyai panjang sisi

- ☐  $AB = 5\text{cm}$  &  $AC = 12\text{cm}$ , jika besar  $\angle BAC = 120^\circ$ .

- ☐ Hitunglah panjang sisi BC? (dgn aturan cosinus)



☐ Jawaban

1.	$\frac{a}{\sin \alpha} = \frac{b}{\sin \beta}$	$\frac{c}{\sin \gamma} = \frac{b}{\sin \beta}$
<input type="checkbox"/>	$\frac{15}{\sin \alpha} = \frac{20}{\sin 60}$	$\frac{c}{\sin 79,5} = \frac{20}{\sin 60}$
<input type="checkbox"/>	$\frac{15}{\sin \alpha} = \frac{20}{\frac{1}{2}\sqrt{3}}$	$c = \frac{20 \times \sin 79,5}{\frac{1}{2}\sqrt{3}}$
<input type="checkbox"/>	$\frac{15\sqrt{3}}{2} = 20 \sin \alpha$	$c = 22,7\text{cm}$
<input type="checkbox"/>	$\sin \alpha = \frac{15\sqrt{3}}{40} = \frac{3\sqrt{3}}{8} = 40,5^\circ$	
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>	$\alpha + \beta + \gamma = 180$	
<input type="checkbox"/>	$\gamma = 180 - \alpha - \beta$	
<input type="checkbox"/>	$= 180 - 60 - 40,5 = 79,5^\circ$	

Date: \_\_\_\_\_

2.	<u>20</u> = 30
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	$\sin(c)$	$\sin(30)$
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	$\sin(c) = \frac{1}{3}$

$$\boxed{\phantom{000}} \quad \sin^2 c + \cos^2 c = 1$$

	$\cos^2 c = 1 - \frac{1}{9}$

	$AB = \frac{\sqrt{8}}{9} = \frac{2}{3} \sqrt{2}$

3.	$L \Delta = \frac{1}{2} \cdot A^2 \cdot 3 \cdot \sin(60^\circ)$

<input type="text"/>	$= \frac{1}{6} \cdot \sin(60^\circ) \frac{\sqrt{3}}{2}$
<input type="text"/>	$= 3\sqrt{3} \text{ cm}^2$

$$4. \quad 1 = 5^2 + 12^2 - 2(12)(5) \cdot \cos(120^\circ)$$

$$\boxed{\phantom{000}} \quad BC^2 = 229$$

	$B_c = \sqrt{229}$
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