



# LKM

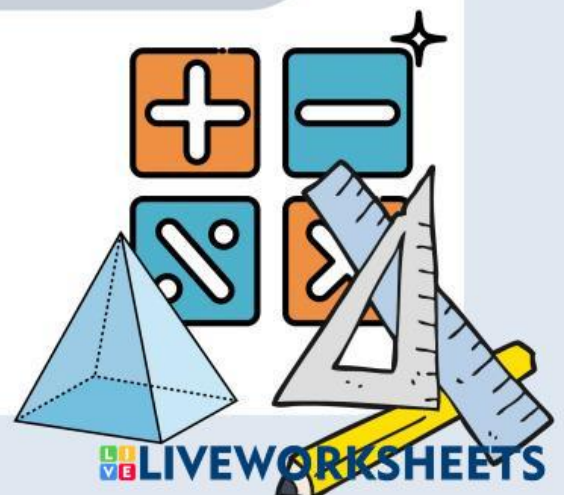
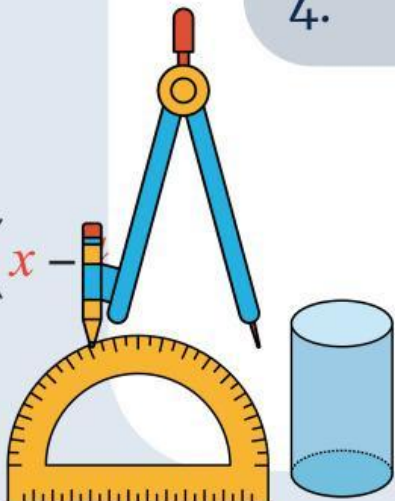
(Lembar Kerja Mahasiswa)

## Jumlah dan selisih sinus cosinus, Identitas Trigonometri

Kelompok :

Anggota :

- 1.
- 2.
- 3.
- 4.



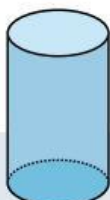
## A. Jumlah dan Selisih Sinus Cosinus



1. Tentukan nilai dari :

a.  $\sin 75^\circ - \sin 15^\circ$

b.  $\cos 165^\circ + \cos 75^\circ$





2. Bentuk sederhana dari pecahan

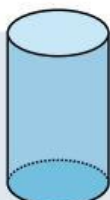
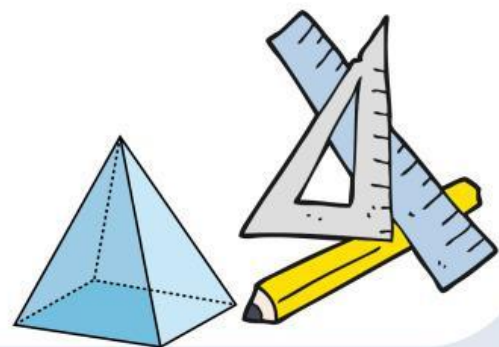
$$\frac{\sin 5x - \sin 3x}{\cos 5x + \cos 3x} \text{ adalah.....}$$

☐  $\tan 4x$

☐  $\cot 4x$

☐  $\tan x$

☐  $\cot x$





3. Buktikan identitas trigonometri berikut

$$\frac{\sin A + \sin B}{\cos A + \cos B} = \left( \frac{A + B}{2} \right)$$

pilihlah langkah yang sesuai dengan menggeser jawaban yang benar.

$$\frac{\sin \left( \frac{A+B}{2} \right)}{\cos \left( \frac{A+B}{2} \right)} = \tan \left( \frac{A+B}{2} \right)$$

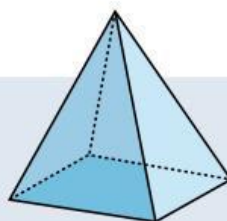
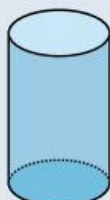
langkah 1

$$\frac{2\cos \left( \frac{A+B}{2} \right) \cos \left( \frac{A-B}{2} \right)}{2\sin \left( \frac{A+B}{2} \right) \cos \left( \frac{A-B}{2} \right)}$$

langkah 2

$$\frac{2\sin \left( \frac{A+B}{2} \right) \cos \left( \frac{A-B}{2} \right)}{2\cos \left( \frac{A+B}{2} \right) \cos \left( \frac{A-B}{2} \right)}$$

$$\frac{\cos \left( \frac{A+B}{2} \right)}{\sin \left( \frac{A+B}{2} \right)} = \tan \left( \frac{A+B}{2} \right)$$





## B. Identitas Trigonometri

1. Pasangkanlah bentuk identitas di kolom sebelah kiri dengan bentuk setara di kolom sebelah kanan yang sesuai!

$$\tan A \cdot \cos A$$

$$1$$

$$\sin^2 A + \cos^2 A$$

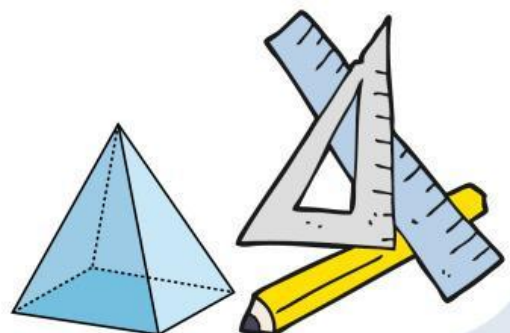
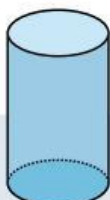
$$\sin A$$

$$\frac{1}{\csc A}$$

$$\cot A$$

$$\frac{\cos A}{\sin A}$$

$$\sin A$$



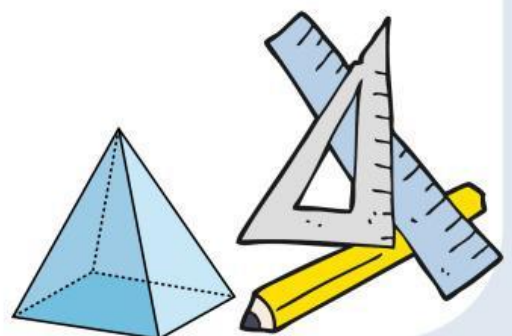
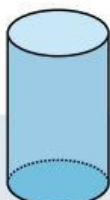


2. Hasil sederhana dari bentuk trigonometri berikut adalah.....

$$\frac{1 - \cos^2 A}{\sin A}$$

3. Hitunglah nilai dari bentuk berikut :

$$5\sin^2 (30^\circ) + 5\cos^2 (30^\circ) = \dots\dots$$





# THANK YOU

