

LATIHAN 2.2

Rumus Jumlah & Selisih Cosinus

Mari Berlatih
dengan
mengerjakan
soal-soal
berikut !

NAMA :
KELAS :

Pasangkan setiap kotak-kotak di samping hingga membentuk persamaan yang sesuai !

$$\cos(a + b) = \dots\dots\dots$$

$$\cos(\alpha - \beta) = \dots\dots\dots$$

$$\cos a \cos b$$

$$\sin \alpha \sin \beta$$

$$\cos a \sin b$$

$$\cos \alpha \cos \beta$$

$$+$$

$$\pm$$

$$\sin a \cos b$$

$$\cos \beta \sin \alpha$$

$$\sin a \sin b$$

$$\sin \beta \cos \alpha$$

$$-$$

$$\div$$

Pasangkan soal berikut ke jawaban yang benar !



Soal

$$\cos(90^\circ + A) = \dots$$

$$\cos 15^\circ = \dots$$

$$\cos 75^\circ = \dots$$

$$\cos(45^\circ + 60^\circ) = \dots$$



Jawaban

$$\cos(45^\circ + 30^\circ)$$

$$\cos 105^\circ$$

$$-\sin A$$

$$\cos(45^\circ - 30^\circ)$$

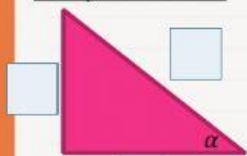
Lengkapi penyelesaian soal berikut ini!

Diketahui : $\sin \alpha = \frac{3}{5}$ $\tan \beta = \frac{1}{7}$

α dan β sudut lancip

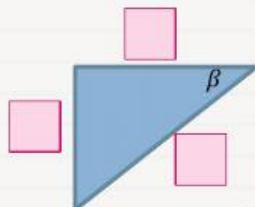
Ditanya : Nilai dari $\cos(\alpha + \beta) = \dots$

Penyelesaian :



$$\sin \alpha = \frac{3}{5}$$

$$\cos \alpha = \frac{4}{5}$$



$$\tan \beta = \frac{1}{7}$$

$$\sin \beta = \frac{1}{\sqrt{50}} \quad \cos \beta = \frac{7}{\sqrt{50}}$$



$$\cos(\alpha + \beta) = \cos \alpha \cos \beta - \sin \alpha \sin \beta$$

$$\cos(\alpha + \beta) = \frac{4}{5} \cdot \frac{7}{\sqrt{50}} - \frac{3}{5} \cdot \frac{1}{\sqrt{50}}$$

$$\cos(\alpha + \beta) = \frac{28 - 3}{5\sqrt{50}}$$

$$\cos(\alpha + \beta) = \frac{25}{5\sqrt{50}} = \frac{5}{\sqrt{50}} = \frac{\sqrt{50}}{10}$$