
SUDUT RANGKAP

Nama :

Kelas :

No urut:

A. Rumus Sudut Rangkap

Petunjuk: $\sin x + \sin x = 2 \sin x$

$$\sin x \cdot \sin x = \sin^2 x$$

Jawablah pertanyaan dengan cara mengisikan pilihan jawaban yang tepat

Pilihan jawaban soal nomor 1 sampai dengan 3

a. $\cos^2 A - \sin^2 A$

d. $\frac{2 \tan A}{1 - \tan^2 A}$

b. $2 \sin^2 A \cos^2 A$

e. $\frac{\tan 2A}{1 - \tan^2 A}$

c. $2 \sin A \cos A$

1. $\sin 2A = \sin (A + A)$
 $= \sin A \cos A + \cos A \sin A$
 $= \dots$

2. $\cos 2A = \cos (A + A)$
 $= \cos A \cos A - \sin A \sin A$
 $= \dots$

3. $\tan 2A = \tan (A + A)$
 $= \frac{\tan A + \tan A}{1 - \tan A \cdot \tan A}$
 $= \dots$

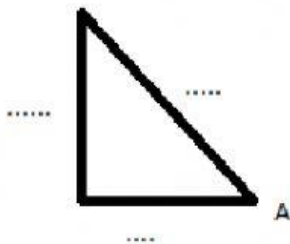
B. Latihan

Gunakan pilihan jawaban di kotak untuk menjawab soal nomor 1 sampai dengan 3

a. $\frac{1}{2}\sqrt{3}$	f. 1	k. $-\frac{1}{4}\sqrt{2} + \sqrt{6}$	p. $\frac{5}{13}$
b. $\frac{1}{2}\sqrt{2}$	g. 2	l. $\frac{1}{4}(\sqrt{2} - \sqrt{6})$	q. $\frac{12}{13}$
c. $\sqrt{3}$	h. 5	m. $\frac{1}{4}(\sqrt{6} - \sqrt{2})$	r. $\frac{120}{169}$
d. $\sqrt{2}$	i. 12	n. $\frac{1}{4}(\sqrt{6} + \sqrt{2})$	s. $\frac{276}{169}$
e. $\sqrt{5}$	j. 13	o. $-\frac{1}{4}(\sqrt{6} + \sqrt{2})$	t. $\frac{1}{2}$

4. Diketahui $\tan A = \sqrt{3}$, $\sin B = \frac{1}{2}\sqrt{2}$. A dan B merupakan sudut lancip.

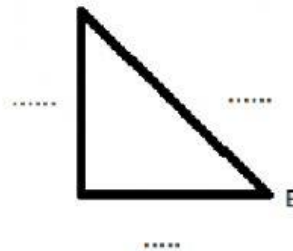
Lengkapilah data di bawah ini!



$$\tan A = \sqrt{3}$$

$$\sin A = \dots$$

$$\cos A = \dots$$



$$\sin B = \frac{1}{2}\sqrt{2}$$

$$\cos B = \dots$$

$$\tan B = \dots$$

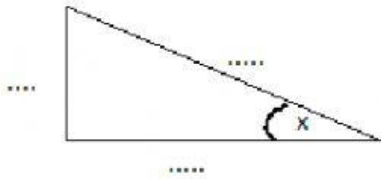
$$\cos (A+B) = \cos A \cdot \cos B - \sin A \cdot \sin B$$

$$= \dots$$

$$\sin (A - B) = \sin A \times \cos B - \cos A \times \sin B$$

$$= \dots$$

5. Diketahui $\tan x = \frac{5}{12}$, $0 < x < \frac{\pi}{2}$



$$\sin x = \dots$$

$$\cos x = \dots$$

$$\sin 2x = 2 \sin x \cdot \cos x$$

$$= \dots$$

$$\cos x + \sin 2x = \dots$$

Pilihan jawaban nomor 6 sampai dengan 10

a. $\sin 120^\circ$

f. 20

k. $-\frac{1}{4}(\sqrt{2} + \sqrt{6})$

p. p

b. $\cos 100^\circ$

g. 21

l. $\sqrt{15}$

q. $\sqrt{1-p^2}$

c. $\cos 60^\circ$

h. 29

m. $-2 + \sqrt{3}$

r. $\sqrt{1+p^2}$

d. $\frac{17}{145}$

i. 1

n. $\frac{1}{8}\sqrt{15}$

s. $2\sqrt{1-p^2}$

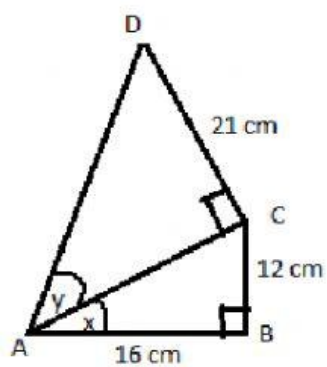
e. $-\frac{7}{8}$

j. 4

o. $-\frac{1}{7}\sqrt{15}$

t. $2p\sqrt{1-p^2}$

6.



$$AC = \dots\dots$$

$$AD = \dots\dots$$

$$\cos(x + y) = \dots$$

7. $\cos 165^\circ = \dots$

$\tan 165^\circ = \dots$

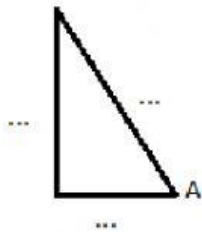
8. $\sin x = \sin 115^\circ \cos 5^\circ + \cos 115^\circ \sin 5^\circ$

$\sin x = \dots$

$\cos x = \cos 80^\circ \cos 20^\circ + \sin 80^\circ \sin 20^\circ$

$\cos x = \dots$

9. Diketahui $\cos A = \frac{1}{4}$, dengan A sudut lancip.

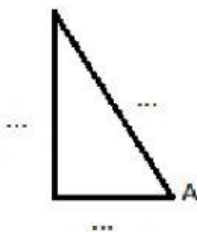


$\sin 2A = \dots$

$\cos 2A = \dots$

$\tan 2A = \dots$

10. Diketahui $\sin A = p$. *Petunjuk: p mempunyai nilai yang sama dengan $\frac{p}{1}$*



$\sin 2A = \dots$