

Nama: Manderouw Kapisa
Kelas = X MIPA 6.

Jawaban :

1) Tentukan nilai $\tan 1^\circ \cdot \tan 2^\circ \cdot \tan 3^\circ \dots \dots \dots \tan 89^\circ$

$$= (\tan 1^\circ \tan 89^\circ) (\tan 2^\circ \tan 88^\circ) (\tan 3^\circ \tan 87^\circ) \dots$$

$$(\tan 44^\circ \tan 46^\circ) \tan 45^\circ$$

$$= 1 \times 1 \times 1 \times 1 \times \dots \times 1 \times 1$$

$$= 1 \rightarrow \text{hasil perkalian}$$

$$2) \sin (5a + 48)^\circ = \cos (10 - 3a)^\circ$$

$$\cos \{ 90 - (5a + 48)^\circ \} = \cos (10 - 3a)^\circ$$

$$90 - (5a + 48) = 10 - 3a$$

$$90 - 5a - 48 = 10 - 3a$$

$$-5a + 3a = 10 - 90 + 48$$

$$-2a = -32$$

$$a = 16^\circ$$

$$3) 4 \sin 290^\circ + 2 \cos 520^\circ - n \cos 20^\circ = 0$$

$$4 \sin (360 - 70)^\circ + 2 \cos (360 + 160)^\circ - n \cos 20^\circ = 0$$

$$-4 \sin 70^\circ + 2 \cos 160^\circ - n \cos 20^\circ = 0$$

$$-4 \cos (90 - 70)^\circ + 2 \cos (180 - 20)^\circ - n \cos 20^\circ = 0$$

$$-4 \cos 20^\circ + 2 \cos 20^\circ - n \cos 20^\circ = 0$$

$$(-4 + 2 - n) \cos 20^\circ = 0$$

$$-4 + 2 - n = 0$$

$$-2 - n = 0$$

$$n = -2$$