

Demuestra las identidades trigonométricas propuestas

$$34.- \quad 1 - \frac{\operatorname{sen}^2 \alpha}{1 + \cos \alpha} = \cos \alpha$$

$$35.- \quad \frac{1 - \operatorname{sen} \alpha}{1 + \operatorname{sen} \alpha} = (\sec \alpha - \operatorname{tg} \alpha)^2$$

$$36.- \quad \frac{1 - \cos \alpha}{1 + \cos \alpha} = (\operatorname{cosec} \alpha - \operatorname{cotg} \alpha)^2$$

$$37.- \quad \operatorname{tg} \alpha + \frac{\cos a}{1 + \operatorname{sen} a} = \sec a$$

$$38.- \quad \frac{\operatorname{sen} \alpha \cos \alpha}{\cos^2 \alpha - \operatorname{sen}^2 \alpha} = \frac{\operatorname{tg} a}{1 - \operatorname{tg}^2 a}$$

$$39.- \quad \frac{\operatorname{tg} \alpha - \operatorname{cot} \alpha}{\operatorname{tg} \alpha + \operatorname{cot} \alpha} = \operatorname{sen}^2 \alpha - \cos^2 \alpha$$

$$40.- \quad \frac{\sec a - \cos \alpha}{\sec a + \cos \alpha} = \frac{\operatorname{sen}^2 a}{1 + \cos^2 a}$$

$$41.- \quad \frac{\sec a}{1 + \sec a} = \frac{1 - \cos a}{\operatorname{sen}^2 a}$$

$$42.- \quad \frac{\operatorname{tg} \alpha - \operatorname{cot} \alpha}{\operatorname{tg} \alpha + \operatorname{cot} \alpha} = 2 \operatorname{sen}^2 \alpha - 1$$

$$43.- \quad \frac{\sec a + \operatorname{tg} \alpha}{\operatorname{cot} a + \cos \alpha} = \operatorname{tg} \alpha \sec \alpha$$

$$44.- \quad \frac{1 - \operatorname{tg}^2 \alpha}{1 + \operatorname{tg}^2 \alpha} = 2 \cos^2 \alpha - 1$$

$$45.- \quad \frac{\sec \alpha - \operatorname{cosec} \alpha}{\sec \alpha \cdot \operatorname{cosec} \alpha} = \operatorname{sen} \alpha - \cos \alpha$$

$$46.- \quad \frac{\operatorname{sen}^2 \alpha - \operatorname{tg} \alpha}{\cos^2 \alpha - \operatorname{cot} \alpha} = \operatorname{tg}^2 \alpha$$