

## PROBLEMAS DE TRIGONOMETRÍA

Problema 26:

$$\cos x = \frac{(\operatorname{sen} x + \frac{1}{2}) \frac{\operatorname{sen} 2x}{2}}{\sqrt{1 - \cos^2 x}}$$

Solución Problema 26:

$$\cos x = \frac{(\operatorname{sen} x + \frac{1}{2}) \frac{\operatorname{sen} 2x}{2}}{\sqrt{1 - \cos^2 x}}$$

$$\cos x = \frac{(\operatorname{sen} x + \frac{1}{2}) \frac{2 \operatorname{sen} x \cos x}{2}}{\sqrt{1 - \cos^2 x}} =$$

$$\cos x = \frac{(\operatorname{sen} x + \frac{1}{2}) \operatorname{sen} x \cos x}{\operatorname{sen} x}$$

$$\cancel{\operatorname{sen} x \cos x} = (\operatorname{sen} x + \frac{1}{2}) \cancel{\operatorname{sen} x \cos x}$$

$$1 = (\operatorname{sen} x + \frac{1}{2})$$

$$\operatorname{sen} x = 1 - \frac{1}{2} = \frac{1}{2}$$

$$x = \operatorname{arcsen} \frac{1}{2} = 30^\circ$$

**x = 30° ó 150**