

Arco Soma e Arco Diferença

1- Calcule:

- a) $\text{sen } 75^\circ$
- b) $\text{sen}(\pi + x)$
- c) $\text{sen } 15^\circ$
- d) $\text{cos } 75^\circ$
- e) $\text{cos } 15^\circ$

2- Dado $\text{sen } x = 1/3$, com $0 < x < \pi/2$, calcule $\text{sen}(\frac{\pi}{6} - x)$.

3- Dado $\text{sen } x = 1/3$, com $0 < x < \pi/2$, calcule $\text{sen}(30^\circ - x)$.

4- Dados $\text{sen } x = 3/5$ e $\text{cos } y = 5/13$, calcule $\text{cos}(x + y)$, sabendo que $0 < x < \pi/2$ e $\pi < y < \frac{3\pi}{2}$.

5- Sabendo que $\text{tg } x = m$ e $\text{tg } y = 2m$, determine $\text{tg}(x + y)$ e $\text{cotg}(x + y)$.

6- Sabendo que $\text{tg}(p+q) = 42$ e que $\text{tg } q = 7$, determine $\text{tg } p$

Gabarito

1) a) $\frac{\sqrt{6} + \sqrt{2}}{4}$

b) $-\text{sen } x$

c) $\frac{\sqrt{6} - \sqrt{2}}{4}$

d) $\frac{\sqrt{6} - \sqrt{2}}{4}$

e) $\frac{\sqrt{6} + \sqrt{2}}{4}$

2) $\frac{\sqrt{8} - \sqrt{3}}{6}$

3) $\frac{2\sqrt{2}}{3}$

4) $56/65$

5) $\frac{1 - 2m^2}{3m}$

6) $7/59$