

Raons trigonomètriques de qualsevol angle

1. Explica en quin quadrant es troba l'angle α i calcula les raons trigonomètriques que falten:

a. $\text{sen}\alpha = \frac{4}{5}$ y $\alpha < 90^\circ$

b. $\text{cos}\alpha = \frac{2}{3}$ y $\alpha > 270^\circ$

c. $\text{tg}\alpha = 3$ y $\alpha > 180^\circ$

d. $\text{sen}\alpha = 0,6$ y $\text{cos}\alpha < 0$

e. $\text{cos}\alpha = -\frac{1}{3}$ y $\text{tg}\alpha > 0$

f. $\text{tg}\alpha = -2$ y $\text{sen}\alpha > 0$

Sol. a) I Quadrant: $\text{cos}\alpha = \frac{3}{5}, \text{tg}\alpha = \frac{4}{3}$;

b) IV Quadrant: $\text{sen}\alpha = -\frac{\sqrt{5}}{3}, \text{tg}\alpha = -\frac{\sqrt{5}}{2}$;

c) III Quadrant: $\text{sen}\alpha = -\frac{3\sqrt{10}}{10}, \text{cos}\alpha = -\frac{\sqrt{10}}{10}$;

d) II Quadrant: $\text{cos}\alpha = -0,8, \text{tg}\alpha = -0,75$;

e) III Quadrant: $\text{sen}\alpha = -\frac{2\sqrt{2}}{3}, \text{tg}\alpha = 2\sqrt{2}$;

f) II Quadrant: $\text{sen}\alpha = \frac{2\sqrt{5}}{5}, \text{cos}\alpha = -\frac{\sqrt{5}}{5}$