Answer on Question #79063 – Math – Calculus

Question

The point P(21, 28) is on the terminal side of θ. Evaluate sin θ.

Solution

Since P (21,28)

$$r = \sqrt{x^2 + y^2}$$

$$r = \sqrt{21^2 + 28^2}$$

$$r = 35$$

$$\text{Sin } \theta = \frac{y}{r}$$

$$\text{Sin } \theta = \frac{28}{35}$$

$$\theta = \text{Sin}^{-1}\frac{28}{35}$$

$$\theta = 53.13°$$

Answer: $\text{Sin } \theta = \frac{28}{35}$.