

Answer on Question #46306 – Math - Trigonometry

The value of three angles at a point are $3y-45^\circ$, $y+25^\circ$ and y° . Find the value of y .

56°

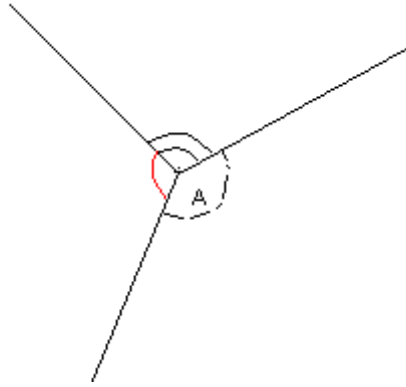
86°

78°

76°

Solution:

We have three angles at point A (see picture). Sum all these angles is equal 360° (degrees). (Sum all angles at a point is equal 360°).



Therefore obtain the equation

$$(3y - 45^\circ) + (y + 25^\circ) + y = 360^\circ$$

Solve it

$$5y - 20^\circ = 360^\circ$$

$$5y = 380^\circ$$

$$y = \frac{380^\circ}{5} = 76^\circ$$

Answer: $y = 76^\circ$.