

Answer on Question #57376 – Math – Analytic Geometry

Question

Choose the point on the terminal side of -45° .

(-3, -3)

(4, -4)

(5, 5)

(-2, 2)

Solution

If a point is on the terminal side of -45° then this means that

$$x = t \cdot \cos(-45^\circ), \quad y = t \cdot \sin(-45^\circ), \quad t > 0;$$

$$\cos(-45^\circ) = \frac{\sqrt{2}}{2} > 0, \quad \sin(-45^\circ) = -\frac{\sqrt{2}}{2} < 0;$$

$x > 0, y < 0$; Only point $(x, y) = (4, -4)$ has $x > 0$ and $y < 0$.

Answer: (4;-4).