

$$y = \sqrt{((x+6)^2 + 25)} + \sqrt{((x-6)^2 + 121)}$$

Simplifying the equation

$$y = \sqrt{(x+6)^2 + 5^2} + \sqrt{(x-6)^2 + 11^2}$$

$$y = (x+6+5) + (x-6+11)$$

$$y = x + x + \cancel{6} - \cancel{6} + 5 + 11$$

$$y = 2x + 16$$

This is a linear equation because;

$$\boxed{y = mx + b}$$

$m = \text{slope}$, $b = y\text{-intercept}$

To get the minimum value, let $y = 0$

$$\therefore 0 = 2x + 16$$

$$-16 = 2x$$

$$x = -16 / 2$$

$$(-8, y)$$

$$x = -8$$

\therefore The minimum value of the positive real number y is at $(-8, 0)$