y = sqrt((x+6)^2 + 25) + sqrt((x-6)^2 + 121)

Solution:

y = sqrt((x+6)^2 + 25) + sqrt((x-6)^2 + 121)

y - √ (+ 121) = √ (+ 25)

Square both sides to remove square root

(y - √ (+ 121)) ^2 = √ (+ 25) ^2

-2y√+ 121) + (+ 121)) = (() ()) +25

-2y√+ 121) + (() ()) +121 =+12x+36+25

-2y√+ 121) +-12x+36+121=+12x+61

-2y√+ 121) +-12x+157=+12x+61

Group like terms

-2y√+ 121) =-+12x+12x+61-157

-2y√+ 121) =24x-96

-24x+96=2y√+ 121)

Square both sides to remove square root

(-24x+96) (-24x+96) =(√+ 121)

- 24x+96-24x+576-2304x+96-2304x+9216=(-12x+157)

- 48x-4608x +192+576+9216=- 48x+628

Group like terms

- 4608x-436+576+9216=

-436+9216=-576+4608x

-436-=-576+4608x-9216

Solve for x in the quadric equation using almighty formula

Makes x=4

-436-=0

-436-=0

-500=0

Divide through by

-500=0

=500

y=√500

y =22.36