

Exercise 24

In Exercises 19–28, find any intercepts.

$$y = (x - 1)\sqrt{x^2 + 1}$$

Solution

To find the y -intercept, plug in $x = 0$ to the function.

$$y = (0 - 1)\sqrt{(0)^2 + 1} = -1$$

Therefore, the y -intercept is $(0, -1)$. To find the x -intercept(s), set $y = 0$ and solve the equation for x .

$$(x - 1)\sqrt{x^2 + 1} = 0$$

$$x - 1 = 0$$

$$x = 1$$

Therefore, the x -intercept is $(1, 0)$.

