

Exercise 20

In Exercises 19–28, find any intercepts.

$$y = 4x^2 + 3$$

Solution

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

$$y = 4(0)^2 + 3 = 3$$

Therefore, the y -intercept is $(0, 3)$. To find the x -intercept(s), set $y = 0$ and solve the equation for x .

$$4x^2 + 3 = 0$$

$$4x^2 = -3$$

$$x^2 = -\frac{3}{4}$$

No real value of x satisfies this equation, so there are no x -intercepts.

