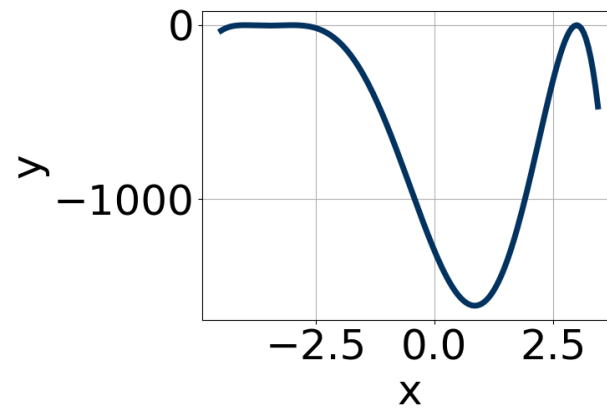


1. Describe the zero behavior of the zero  $x = -2$  of the polynomial below.

$$f(x) = 6(x - 5)^7(x + 5)^4(x + 2)^9(x - 2)^6$$

2. Write an equation that *could* represent the graph below.



3. Construct the lowest-degree polynomial given the zeros below.

$$\frac{-4}{3}, \frac{-5}{3}, \text{ and } -7$$

4. Describe the zero behavior of the zero  $x = -8$  of the polynomial below.

$$f(x) = -6(x + 2)^{11}(x - 2)^7(x + 8)^3(x - 8)^2$$

5. Construct the lowest-degree polynomial given the zeros below.

$$\frac{1}{2}, \frac{3}{4}, \text{ and } 4$$

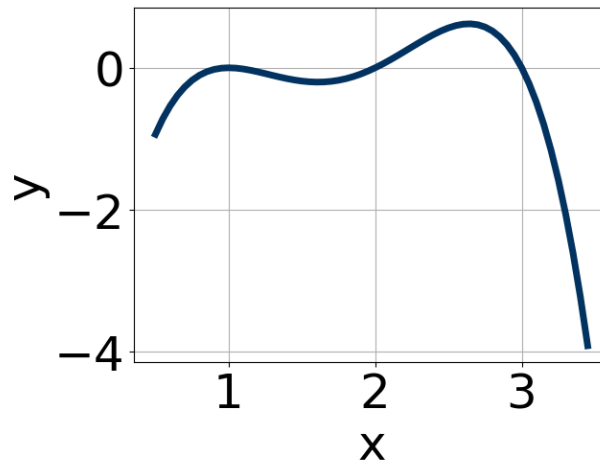
6. Describe the end behavior of the polynomial below.

$$f(x) = 2(x + 7)^4(x - 7)^9(x - 4)^2(x + 4)^2$$

7. Construct the lowest-degree polynomial given the zeros below.

$$-2 + 2i \text{ and } -2$$

8. Write an equation that *could* represent the graph below.





9. Construct the lowest-degree polynomial given the zeros below.

$$-2 + 2i \text{ and } 3$$

10. Describe the end behavior of the polynomial below.

$$f(x) = 5(x + 9)^4(x - 9)^7(x - 7)^4(x + 7)^4$$