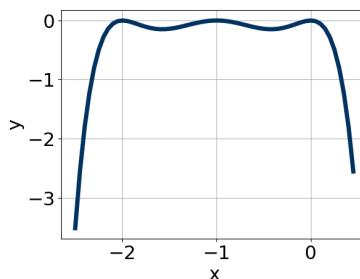


26. Which of the following equations *could* be of the graph presented below?



- A. $-18x^{10}(x+1)^9(x+2)^5$
 B. $-8x^6(x+1)^{10}(x+2)^{11}$
 C. $-2x^8(x+1)^8(x+2)^4$
 D. $6x^4(x+1)^{10}(x+2)^9$
 E. $14x^4(x+1)^8(x+2)^4$
-
27. Construct the lowest-degree polynomial given the zeros below. Then, choose the intervals that contain the coefficients of the polynomial in the form $x^3 + bx^2 + cx + d$.

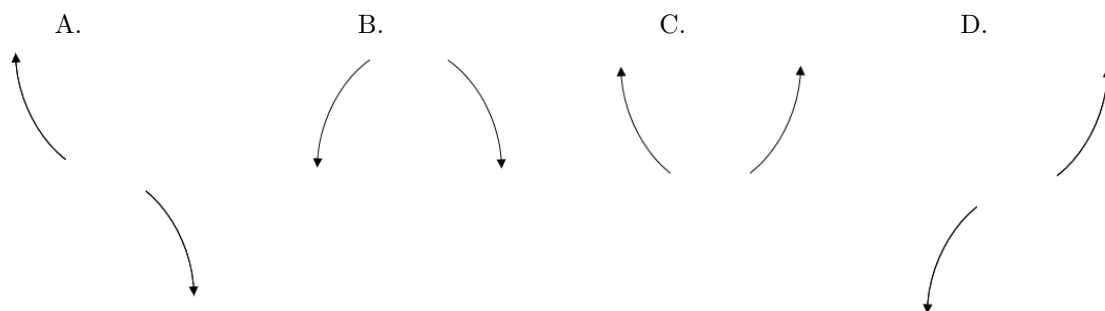
$$-4 + 2i \text{ and } -3$$

- A. $b \in [0, 6], c \in [-3, 5], \text{ and } d \in [-10, -3]$
 B. $b \in [0, 6], c \in [5, 12], \text{ and } d \in [9, 14]$
 C. $b \in [5, 12], c \in [43, 55], \text{ and } d \in [51, 63]$
 D. $b \in [-16, -9], c \in [43, 55], \text{ and } d \in [-67, -56]$
 E. None of the above.
-
28. Construct the lowest-degree polynomial given the zeros below. Then, choose the intervals that contain the coefficients of the polynomial in the form $ax^3 + bx^2 + cx + d$.

$$\frac{1}{4}, -5, 7$$

- A. $a \in [0, 7], b \in [-47.7, -42], c \in [120, 137], \text{ and } d \in [31, 41]$
 B. $a \in [0, 7], b \in [-12.1, -7.8], c \in [-139, -134], \text{ and } d \in [-43, -30]$
 C. $a \in [0, 7], b \in [-12.1, -7.8], c \in [-139, -134], \text{ and } d \in [31, 41]$
 D. $a \in [0, 7], b \in [-8.9, -6.8], c \in [-149, -141], \text{ and } d \in [-43, -30]$
 E. $a \in [0, 7], b \in [8.2, 12.2], c \in [-139, -134], \text{ and } d \in [-43, -30]$
-
29. Describe the end behavior of the polynomial below.

$$f(x) = 8(x-8)^5(x-7)^5(x+7)^{10}(x+8)^5$$



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

$$f(x) = -9(x - 7)^6(x - 4)^{10}(x + 4)^7(x + 7)^3$$

