26. Construct the lowest-degree polynomial given the zeros below. Then, choose the intervals that contain the coefficients of the polynomial in the form $x^3 + bx^2 + cx + d$.

$$-5 + 4i \text{ and } -4$$

A. $b \in [13, 20], c \in [77, 87],$ and $d \in [161, 165]$

B. $b \in [-22, -9], c \in [77, 87],$ and $d \in [-169, -163]$

C. $b \in [-5, 7], c \in [-2, 4],$ and $d \in [-17, -8]$

D. $b \in [-5, 7], c \in [7, 11],$ and $d \in [19, 22]$

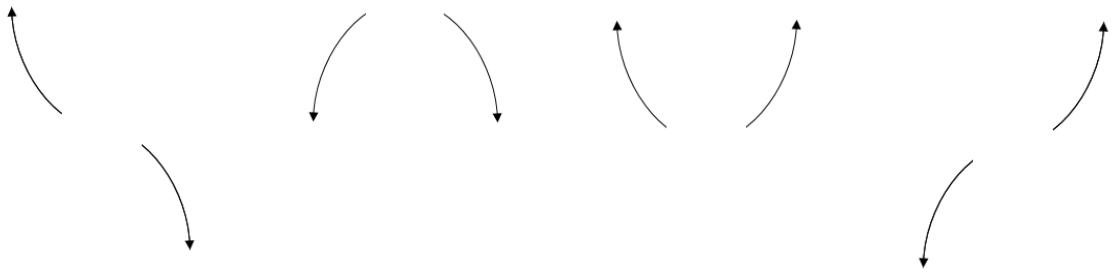
E. None of the above.

---

27. Describe the end behavior of the polynomial below.

$$f(x) = 9(x-6)^3(x-5)^4(x+5)^2(x+6)^4$$

A. B. C. D.



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28. Construct the lowest-degree polynomial given the zeros below. Then, choose the intervals that contain the coefficients of the polynomial in the form $ax^3 + bx^2 + cx + d$.

$$\frac{-1}{2}, 6, \frac{-1}{4}$$

A. $a \in [0, 16], b \in [43, 49], c \in [-17, -4],$ and $d \in [-15, -3]$

B. $a \in [0, 16], b \in [-49, -38], c \in [-41, -25],$ and $d \in [-15, -3]$

C. $a \in [0, 16], b \in [-49, -38], c \in [-41, -25],$ and $d \in [1, 9]$

D. $a \in [0, 16], b \in [41, 44], c \in [-41, -25],$ and $d \in [1, 9]$

E. $a \in [0, 16], b \in [-57, -48], c \in [10, 13],$ and $d \in [1, 9]$

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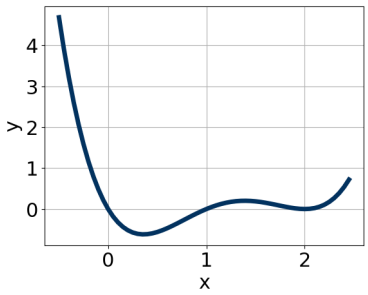
29. Which of the following equations *could* be of the graph presented below?



A. $-14x^7(x-2)^6(x-1)^5$

B. $-3x^8(x-2)^4(x-1)^7$

C. $7x^9(x-2)^8(x-1)^9$

D. $19x^9(x-2)^7(x-1)^4$

E. $9x^7(x-2)^{10}(x-1)^8$

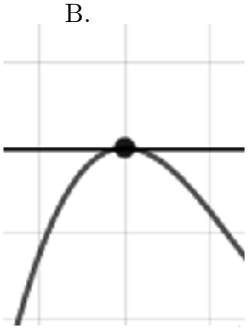
---

30. Describe the zero behavior of the zero $x = -6$ of the polynomial below.

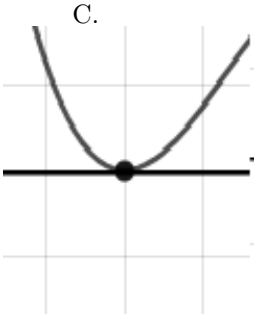
$$f(x) = 6\,(x-6)^4\,(x-3)^7\,(x+3)^4\,(x+6)^3$$

A.

B.



C.



D.