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

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

A. $b \in [-17, -8], c \in [72, 75],$ and $d \in [-165, -158]$

B. $b \in [0, 3], c \in [-7, 4],$ and $d \in [-27, -16]$

C. $b \in [9, 17], c \in [72, 75],$ and $d \in [162, 169]$

D. $b \in [0, 3], c \in [-9, -4],$ and $d \in [10, 22]$

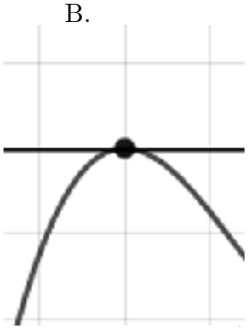
E. None of the above.

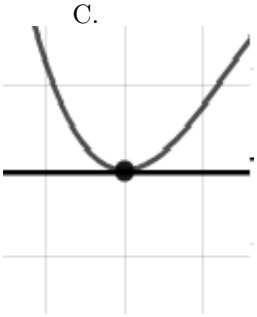
---

27. Describe the zero behavior of the zero $x = 9$ of the polynomial below.

$$f(x) = -7\,(x-9)^5\,(x-3)^{10}\,(x+3)^8\,(x+9)^2$$

A. 

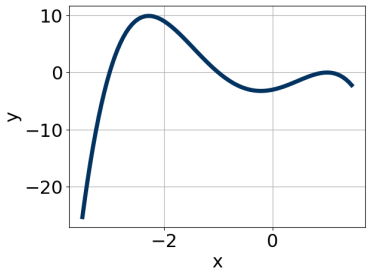
B. 

C. 

D. 

---

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



A. $-6(x-1)^{10}(x+3)^8(x+1)^9$

B. $19(x-1)^{10}(x+3)^{11}(x+1)^7$

C. $-6(x-1)^6(x+3)^7(x+1)^7$

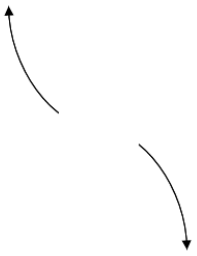
D. $-2(x-1)^9(x+3)^{10}(x+1)^{11}$

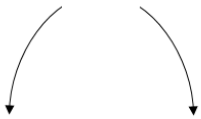
E. $4(x-1)^{10}(x+3)^9(x+1)^6$

---

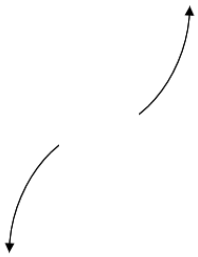
29. Describe the end behavior of the polynomial below.

$$f(x) = -3\,(x-7)^5\,(x-4)^4\,(x+4)^2\,(x+7)^{10}$$

A. 

B. 

C. 

D. 

---

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

$$\frac{1}{2}, \frac{6}{5}, \frac{5}{3}$$

A. $a \in [29, 35], b \in [-102, -98], c \in [102, 106],$ and $d \in [-36, -28]$

B. $a \in [29, 35], b \in [100, 103], c \in [102, 106],$ and $d \in [25, 33]$

C. $a \in [29, 35], b \in [-102, -98], c \in [102, 106],$ and $d \in [25, 33]$

D. $a \in [29, 35], b \in [-82, -69], c \in [15, 19],$ and $d \in [25, 33]$

E. $a \in [29, 35], b \in [-3, 2], c \in [-71, -61],$ and $d \in [-36, -28]$
