

MODULE 2

LESSON 6

QUIZ

1. Question. Which of the following is the possible number of positive and negative zeros of $f(x) = 3x^3 + x^2 - 8x + 10$

A. 1 negative and 2 positive zeros or 1 negative and 0 positive zeros.

B. 2 negative and 1 positive zeros or 0 negative and 1 positive zeros.

C. 1 negative and 1 positive zero.

D. 0 negative and 2 positive zeros or 0 negative and 0 positive zeros

Go to answer 1

2. Question. Which of the following statements is true about $P(x) = 28x^3 + 152x^2 + 40x + 15$?

A. The left side of the graph goes up and the right side of the graph goes down.

B. All 3 zeros of $P(x)$ could be non-real since there are no variations of signs in $P(x)$.

C. 3 is a possible rational zero of $P(x)$.

D. It is possible for $P(x)$ to have 1 negative and 1 positive real zeros and 1 non-real zero.

Go to answer 2

3. Question. Which of the following are all the zeros of $P(x) = x^4 - 2x^3 - 3x^2 + 4x + 4$?

A. $-1, 2$

B. $-2, -1, 1, 2$

C. $-4, -1, 1, 2$

D. $-2, 1$

Go to answer 3

4. Question. Which of the following sets include all zeros of $P(x) = 6x^4 - 11x^3 - 22x^2 + x + 6$?

A. $\{-3, -\frac{1}{2}, \frac{2}{3}, 1\}$

B. $\{-1, -\frac{2}{3}, \frac{1}{2}, 3\}$

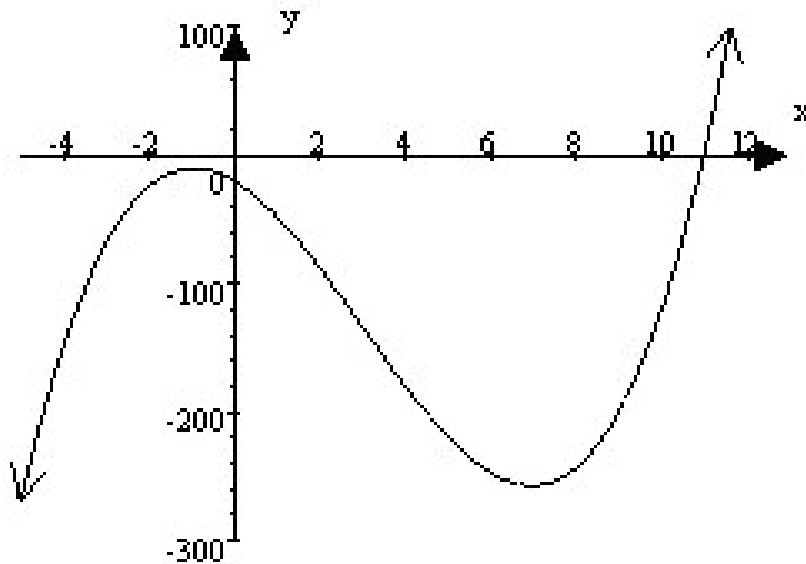
C. $\{-1, -\frac{1}{2}(\text{of multiplicity } 2), 6\}$

D. $\{-1, -\frac{1}{2}, \frac{2}{3}, 3\}$

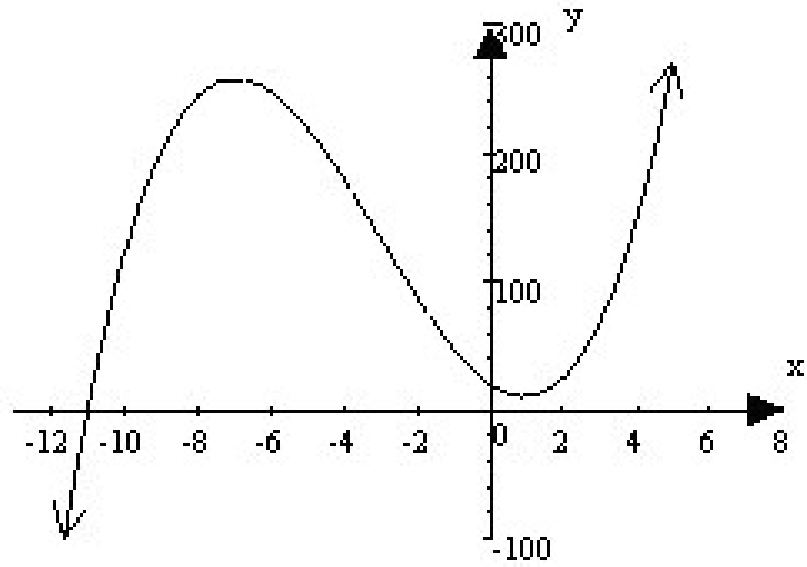
Go to answer 4

5. Question. Which of the following are possible graphs of $P(x) = x^3 - 9x^2 + 20x - 12$?

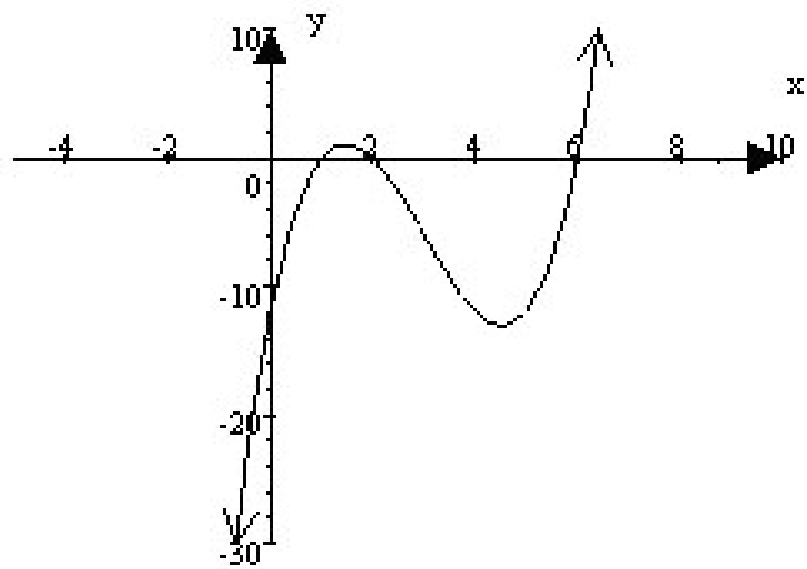
I.



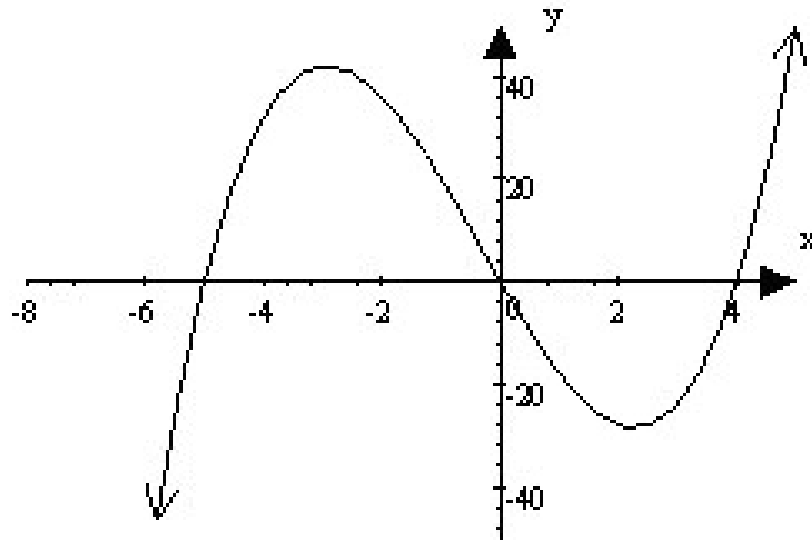
II.



III.



IV.



A. I and III

B. II and III

C. II and IV

D. I and IV

Go to answer 5

1. Answer to Question 1 is "A".
Go back 1

2. Answer to Question 2 is "D".
Go back 2

3. Answer to Question 3 is "C".
Go back 3

4. Answer to Question 4 is "C".
Go back 4

5. Answer to Question 5 is "B".
Go back 5