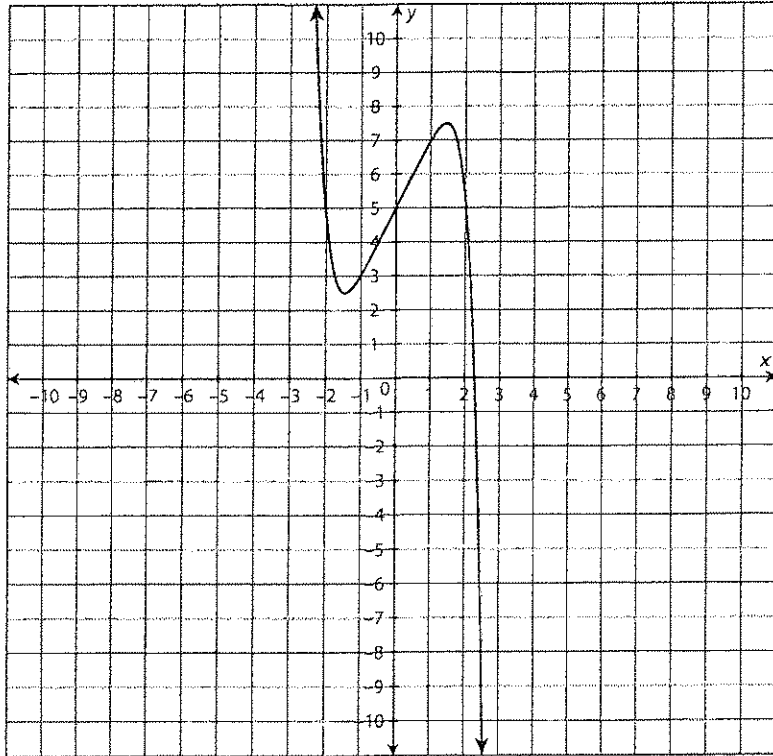




7. What must be true about the degree and the leading coefficient of the graphed polynomial?



- a. The polynomial is an odd-degree polynomial and has a positive coefficient.
- b. The polynomial is an odd-degree polynomial and has a negative coefficient.
- c. The polynomial is an even-degree polynomial and has a positive coefficient.
- d. The polynomial is an even-degree polynomial and has a negative coefficient.

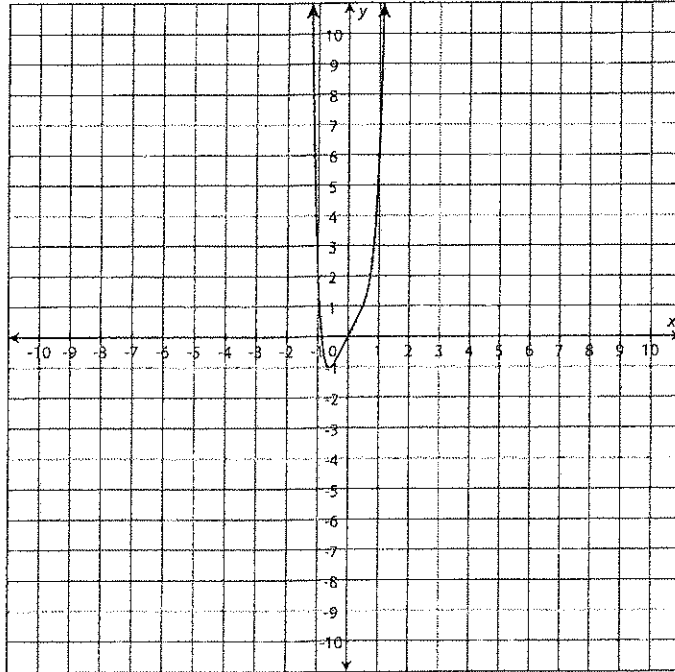
8. What is the remainder when  $(x^3 - 4x^2 + 10)$  is divided by  $(x - 3)$ ?

- a. 1
- b. -53
- c. 31
- d. 7

9. Using synthetic substitution, what is  $p(x) = x^3 - 6x^2 - 5x + 12$  when  $x = -4$ ?

- a. -40
- b. -128
- c. -6
- d. 72

10. Which function could possibly represent the graphed function?



a.  $f(x) = -4x^6 - 2x$

b.  $f(x) = 4x^5 + 8x$

c.  $f(x) = 4x^6 + 2x$

d.  $f(x) = -4x^5 + 3x$