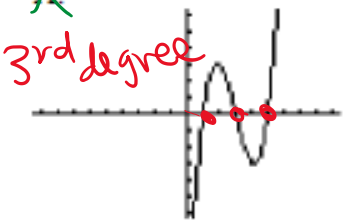
Polynomial Graphs Practice

For each of the following, use the end behavior, leading coefficients, and x-intercepts to match the equation to its graph.

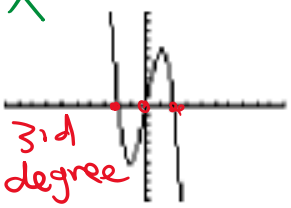
1. $f(x) = x^3 - 3x^2$ I
   $x^2(x-3)$
2. $f(x) = x$ B
3. $f(x) = -3(x-1)(x-2)^2(x-3)$ K
4. $f(x) = -4x^2 - 9$ N
5. $f(x) = x^2(x-3)^3$ J
6. $f(x) = -2x^3 + 8x$ C
   $-2x(x^2-4) = -2x(x+2)(x-2)$
7. $f(x) = (x-1)(x-3)(x-5)$ A
8. $f(x) = -2x^2 + 16x - 24$ F
9. $f(x) = -(x-4)(x-3)(x-1)^2$ O
10. $f(x) = x^4 - 3x^3$ H
    $x^3(x-3)$
11. $f(x) = -2(x+3)^2(x+1)^2$ M
12. $f(x) = -x^3 + 9x$ E
    $-x(x^2-9) = -x(x+3)(x-3)$
13. $f(x) = 3x^4 - 3x^3 - 3x^2 + 3x$ D
    $3x(x^3 - x^2 - x + 1)$
14. $f(x) = -5$ G
15. $f(x) = x^2(x-2)(x-4)$ L

A.



B.

C.



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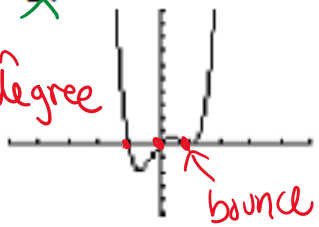

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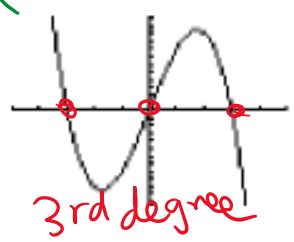

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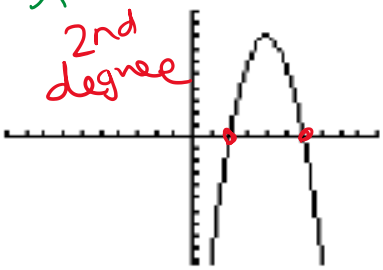

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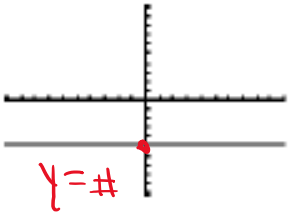

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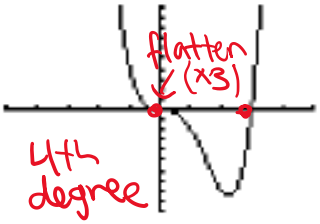
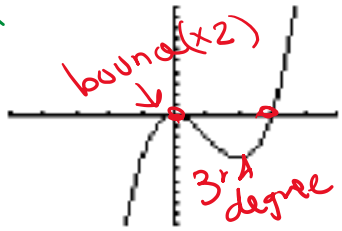


I.



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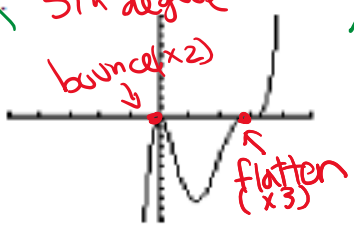
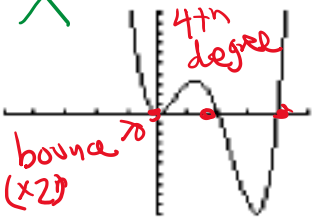


K.

L.



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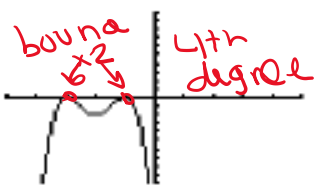
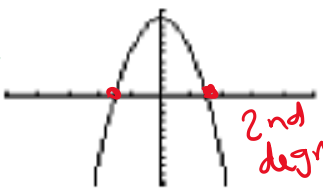


N.



O.