

Math 1513 - College Algebra

Discussion Board Week 10 - Due 2011.03.19

Graph each of the following polynomial functions. State the reasons for the way in which you draw your graphs.

1. $f(x) = x^2(x - 1)(2x + 3)$

2. $f(x) = (x - 2)^2(x + 3)(x - 1)$

3. $f(x) = -(2x + 1)(3x + 2)(4x - 5)(2x + 5)$

4. $f(x) = -x(x - 1)^2(2x - 3)^3$

5. $f(x) = (x + 1)(2x + 3)(2x - 3)^2$

6. $f(x) = -x^2(x + 1)^2(2x - 1)^2$

7. $f(x) = x(5x - 1)(5x + 2)(5x - 3)$

8. $f(x) = x(2x + 1)(3x - 7)^3$

9. $f(x) = -(x + 1)(2x + 1)(3x - 1)$

10. $f(x) = (x - 2)^2(x + 2)^3$

11. $f(x) = (x + 1)^3(x - 3)(x + 2)$

12. $f(x) = (2x + 3)(2x + 5)^2(2x - 7)$

13. $f(x) = x^2(x - 2)^4(x + 1)^2$

14. $f(x) = -x^2(x - 9)^2(x + 9)^2$

15. $f(x) = -(x + 5)(x - 5)(x + 1)(x - 1)$

16. $f(x) = x^3(x - 1)^2(x + 2)^3$

17. $f(x) = (x + 1)(2x - 3)(3x + 4)^2$

18. $f(x) = -x^5(x + 1)^3(2x - 1)^3$

19. $f(x) = 3x^2(2x - 1)^3(2x + 1)^3$

20. $f(x) = -x^2(4x + 1)(3x - 1)(2x + 1)$

21. $f(x) = (2x + 1)^2(4x - 1)^2(3x + 2)$

22. $f(x) = (10 - x)(19 + x)(13 + 2x)(7 - 2x)$

23. $f(x) = -x^2(4x + 1)^2(3x - 2)^2(x + 1)$

24. $f(x) = 4x^3(x - 1)^2(x + 1)^2(2x - 5)$