

Algebra 2B

Practice Quiz on 5-1 & 5-2

Name: _____

Date: _____ Hr: _____

DJW ALL WORK

For #1-2, a.) write each polynomial in standard form. Then b.) classify it by degree and c.) by number of terms

1. $7x^2 - 10x^2 + x$

1. a.) _____

b.) _____

c.) _____

2. $(9x^3 - 4x^2 + 2) - (x^3 + 3x^2 + 1)$

2. a.) _____

b.) _____

c.) _____

For #3-6, determine the end behavior of the graph of each polynomial function.

3. $y = -3x + 6x^2 - 1$

3. _____

4. $y = 8x^{11} - 2x^9 + 3x^6 + 4$

4. _____

5. $y = -3 - 6x^5 - 9x^8$

5. _____

6. $y = -8x^7 + 16x^6 + 9$

6. _____

For #7, determine the degree of the polynomial function with the given data.

7.

x	y
-3	23
-2	-16
-1	-15
0	-10
1	-13
2	-12
3	29

7. _____

For #8-9, write each polynomial in factored form.

8. $x^3 - x^2 - 12x$

8. _____

9. $x^3 + 8x^2 + 16x$

9. _____

For #10-11, a.) find the zeros of each function. b.) Find the points between the zeros. c.) Graph the function by hand.

10. $y = (x - 2)(x + 6)$

10. a.) _____

b.) _____

c.) _____

11. $y = x(x+4)(x-2)$

11. a.) _____

b.) _____

c.) _____

For #12-13, write a polynomial function in standard form with the given zeros.

12. $x = 3, -4$

12. _____

13. $x = 3, 3, -3$

13. _____

14. What are the relative maximum and relative minimum of $f(x) = x^3 + 4x^2 - 5x$? Round all answers to the nearest hundredth.

14. Rel. max _____

Rel. min. _____

