Algebra 2 TEST 2.2 Review **DO ON OWN PAPER!**

I. Simplify. Make all exponents positive.

|  |  |  |  |
| --- | --- | --- | --- |
| 1. | 2. | 3. | 4. |
| 5. | 6. | 7. | 8. |
| 9. | 10. | 11. | 12. |

III. Estimate to the nearest hundredth.

|  |
| --- |
| 13. |

IV. Simplify. Leave answers exact. NO DECIMALS.

|  |  |  |  |
| --- | --- | --- | --- |
| 14. | 15. | 16. | 17. |

V. Given the parent function , write the equation that translates  to have the given vertex.

|  |  |  |  |
| --- | --- | --- | --- |
| 18. | 19. | 20. | 21. |

VI. State the transformations from the parent function.

|  |  |
| --- | --- |
| 22. | 23. |
| 24. | 25. |

VII. Write the equation of  and  with the following transformations.

|  |  |
| --- | --- |
| 26.  translated right 2 and down 3 with a reflection across the -axis | 27.  with a vertical compression factor of  and reflected across the -axis |

VIII. State the vertex for the following functions.

|  |  |  |
| --- | --- | --- |
| 31. | 32. | 33. |

XI. Graph the following functions. Show points including transformations from the parent function. Then state the domain and the range.

|  |  |
| --- | --- |
| 45. | 46. |

Algebra 2 TEST 2.2 Review ANSWERS

1.  2.  3.  4.  5.  6.  7.  8.  9.  10. 

11.  12.  13.  14. 15.  16. 17. 

18.  19.  20.  21. 

22. reflected across the x-axis and translated up 3 units

23. vertical stretch by a factor of 3 and translated to the right 2 units

24. translated down 2 units and to the left 5 units

25. vertical compression by factor of , translated up 5 units and to the right 1 unit

26.  27.  31.  32.  33. (-1,3)

45.  46. 

 