

ALG 2B

Ch 7

Final Exam Review

Graph using tables. Describe transformations. Find domain + range

1. $y = 2\sqrt{x-4} + 1$

2. $y = \frac{1}{2}\sqrt[3]{x+2} - 3$

Simplify: 3. $8^{-4/3}$

4. $(36a^2)^{3/2}$

Solve. Check for extraneous solutions.

5. $\sqrt{x+4} - 3 = 5$

6. $(2x+3)^{1/2} = (-4x+1)^{1/2}$

7. $(x+10)^{2/3} = 4$

For 8-12, use $f(x) = x^2 - 1$ and $g(x) = 3x + 2$

8. Find $f(x) + g(x)$

9. Find $(f-g)(x)$

10. Find $f(x) \cdot g(x)$

11. Find $\left(\frac{f}{g}\right)(x)$

12. Find $(f \circ g)(-1)$

For 13+14, a) Find the inverse $f^{-1}(x)$

13. $f(x) = 2x - 1$

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

b) graph both the original + its inverse

c) tell if inverse is a function

15. Write the following in radical form: $3x^{-2/3}$

16. Write the following in exponential form: $\sqrt[5]{(2x)^7}$