# HW #33: SHOW ALL WORK on a separate piece of paper. No Calculator.
## Answer Section

1. $\sqrt[5]{7}$
2. $\sqrt[4]{11}$
3. $\sqrt[6]{18}$
4. 27
5. 32
6. $\frac{1}{32}$
7. 6
8. $\frac{1}{2}$
9. $\frac{1}{5}$
10. $8\sqrt[3]{25}$
11. $3\sqrt[3]{3}$
12. $x^{\frac{7}{12}}$
13. $8x^6$
14. $\frac{w^{20}}{x^{16}}$
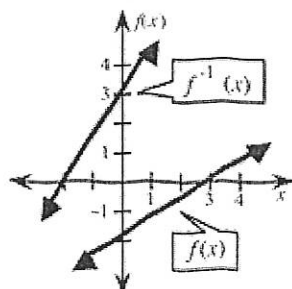15. $12\sqrt[5]{5}$
16. $2\sqrt[7]{3}$
17. $x^2y^2\sqrt[4]{18yz^3}$
18. Yes
19. No
20. $f^{-1}(x) = \frac{3}{2}x + 3$



21. $f^{-1}(x) = \sqrt{x-5}; x \geq 5$
22. $f^{-1}(x) = 2x - 4$

23. $x^2 + 3x + 1$

Domain: all real numbers
24. $x^2 + x - 1$

Domain: all real numbers
25. $x^3 + 3x^2 + 2x$

Domain: all real numbers
26. $\frac{x^2 + 2x}{x + 1}$

Domain: all real numbers except $x = -1$
27. $x^2 + 4x + 3$
Domain: all real numbers