HW #32: SHOW ALL WORK on a separate piece of paper. No Calculator.
Answer Section

1. $\sqrt[5]{7}$

2. $\sqrt[4]{-11}^{\,3}$

3. $\sqrt{18}^{\,5}$

4. 27

5. 32

6. $\dfrac{1}{32}$

7. 6

8. $\dfrac{1}{2}$

9. $\dfrac{1}{5}$

10. $8\sqrt[3]{25}$

11. $3\sqrt[3]{3}$

12. $x^{\frac{7}{12}}$

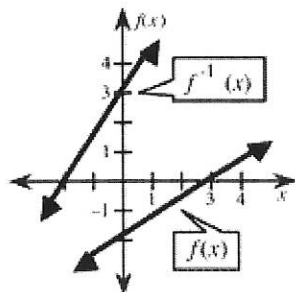13. $8x^6$

14. $\dfrac{w^{20}}{x^{16}}$

15. $12\sqrt[5]{5}$

16. $2\sqrt[7]{3}$

17. $x^2 y^2 \sqrt[4]{18yz^3}$

18. Yes

19. No

20. $f^{-1}(x) = \dfrac{3}{2}x + 3$

21. $f^{-1}(x) = \sqrt{x-5}\,; x \ge 5$

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. $\dfrac{x^2 + 2x}{x + 1}$

Domain: all real numbers except $x = -1$

27. $x^2 + 4x + 3$

Domain: all real numbers