1. (2 points) Simplify $\sqrt[4]{45x^5}$.

2. (2 points) Simplify $\sqrt[3]{54x^5y^{10}}$.

3. (3 points) Simplify $\sqrt[3]{-128x^5y^4z^3}$.

4. (3 points) Simplify $\sqrt[4]{32x^5y^{11}z^{10}}$. 
5. (4 points) Solve: $\sqrt[3]{2x - 3} + 5 = 4$

6. (4 points) Solve: $x - \sqrt[3]{4x^2 + 5x} = 0$

7. (4 points) Solve: $2x - \sqrt{3x^2 - 4x - 4} = 0$

8. (4 points) Solve: $\sqrt{5x + 13} - \sqrt{x - 3} = 0$
9. (3 points) Simplify $\sqrt[3]{x^2} \cdot \sqrt[6]{x}$. Final answer in one single radical.

10. (3 points) Simplify $\sqrt[4]{x} / \sqrt[3]{x}$. Final answer in one single radical.

11. (3 points) Distribute and simplify: $2\sqrt{5} \left( 3\sqrt{10} - \sqrt{5} \right)$

12. (3 points) Foil and simplify: $(3\sqrt{x} + 5)(2\sqrt{x} - 7)$
13. (3 points) Simplify: \(2\sqrt{75x^3} - x\sqrt{300x}\)

14. (3 points) Simplify: \((\sqrt{13} - 2\sqrt{3}) (\sqrt{13} + 2\sqrt{3})\)

15. (3 points) Simplify: \((2\sqrt{3} - 3\sqrt{2})^2\)

16. (3 points) Find the domain of the function \(f(x) = 2 - \sqrt{9 - 4x}\), and express your answer in interval notation.