Math 114 Assignment7.2 Name:_____

DIRECTIONS To receive full credit, you must provide complete solutions to the following problems in the space provided. Transfer all your answers to the space provided on the test paper.

1. Rewrite as a radical and simplify $25^{\frac{1}{2}}$ Ans_____

2. Rewrite as a radical and simplify $-8^{\frac{1}{3}}$ Ans_____

3. Rewrite as a radical and simplify $(-81)^{\frac{1}{4}}$ Ans_____

4. Rewrite as a radical and simplify $\left(\sqrt[3]{125}\right)^2$ Ans_____

5. Rewrite using rational exponents $\left(\sqrt[6]{7xy^2}\right)^3$ Ans_____

6. Rewrite using rational exponents $\sqrt[3]{12x^2}$ Ans_____

7. Rewrite using positive exponents and simplify $x^{-\frac{1}{2}}$ Ans_____

8. Rewrite using positive exponents and simplify $(-16)^{-\frac{2}{3}}$ Ans_____

9. Simplify $2^{\frac{2}{3}} \cdot 2^{\frac{4}{3}}$ Ans_____

10. Simplify $\dfrac{100^{\frac{3}{4}}}{100^{\frac{1}{4}}}$ Ans_____

11. Simplify $\left(17^{\frac{3}{5}}\right)^{\frac{5}{3}}$ Ans_____

12. Simplify $\left(25x^4y^6\right)^{\frac{1}{2}}$ Ans_____

13. Simplify $\sqrt[3]{-64x^6y^3}$ Ans_____

14. Multiply $x^{\frac{1}{3}}\left(x^{\frac{2}{3}}-3x^{\frac{5}{3}}\right)$ Ans_____

15. Complete the table

x	$f(x)=x^{\frac{2}{3}}+1$
0	
1	
3	
	3