

Math 114 Assignment 7.1

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. Evaluate $-\sqrt{16}$ Ans _____

2. Evaluate $\sqrt{\frac{4}{25}}$ Ans _____

3. Let $f(x) = \sqrt{x-2}$, find $f(2)$, $f(6)$, $f(0)$ Ans _____

4. Let $f(x) = \sqrt{(x+1)^2}$, find $f(1)$, $f(-2)$, $f(-3)$ Ans _____

5. Find the domain of $f(x) = \sqrt{x+3}$ in both interval and algebraic notation. write your answer _____

6. Simplify $\sqrt{(x-2)^2}$ Ans _____

7. Simplify $\sqrt{x^2 + 14x + 49}$ Ans _____

8. Find the cube root $\sqrt[3]{-8}$ Ans _____

9. Find the cube root $\sqrt[3]{\frac{-64}{125}}$ Ans_____

10. Simplify $\sqrt[5]{(-5)^5}$ Ans_____

11. Simplify $\sqrt[4]{(x+1)^4}$ Ans_____

12. Find the domain of $f(x) = \frac{\sqrt{x}}{\sqrt{8-x}}$ Ans_____

13. Simplify $g(x) = \frac{\sqrt{x-2}}{\sqrt{7-x}}$ Ans_____

14. Complete the table

x	$f(x) = \sqrt{x+2}$
-2	
0	
2	
	3

15. Complete the table

x	$f(x) = \sqrt{3-x} + 1$
-1	
0	
3	