

Math 2013 - Introduction to Discrete Mathematics

Quiz #4 - 2005.09.16

Solutions

Define $f(x) = x^2 + 1$ and $g(x) = \sqrt{x+1}$.

1. What is the domain of f ?

The domain of f is \mathbb{R} .

2. What is the range of f ?

The range of f is $[1, \infty)$

3. What is the domain of g ?

The domain of g is $[-1, \infty)$

4. What is the range of g ?

The range of g is $[0, \infty)$

5. What is the value of $(f + g)(3)$?

$(f + g)(3) = f(3) + g(3) = 10 + 2 = 12.$