

**Problem 1**

If  $f(x) = x + \sqrt{2-x}$  and  $g(x) = u + \sqrt{2-u}$ , is it true that  $f = g$ ?

**Solution**

True

**Problem 2**

If

$$f(x) = \frac{x^2 - x}{x - 1} \quad \text{and} \quad g(x) = x$$

is it true that  $f = g$ ?

**Solution**

False