

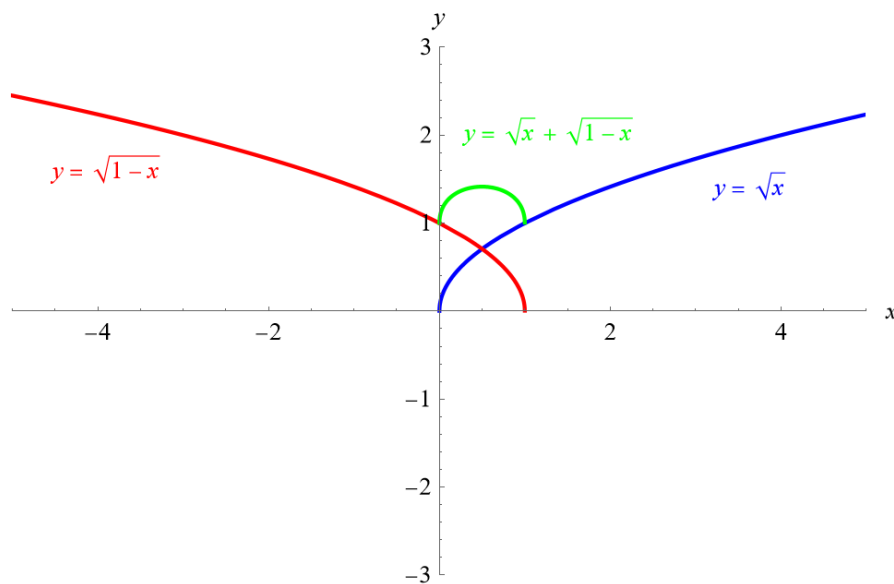
## Exercise 81

(Continuation of Example 1) Graph the functions  $f(x) = \sqrt{x}$  and  $g(x) = \sqrt{1-x}$  together with their (a) sum, (b) product, (c) two differences, (d) two quotients.

### Solution

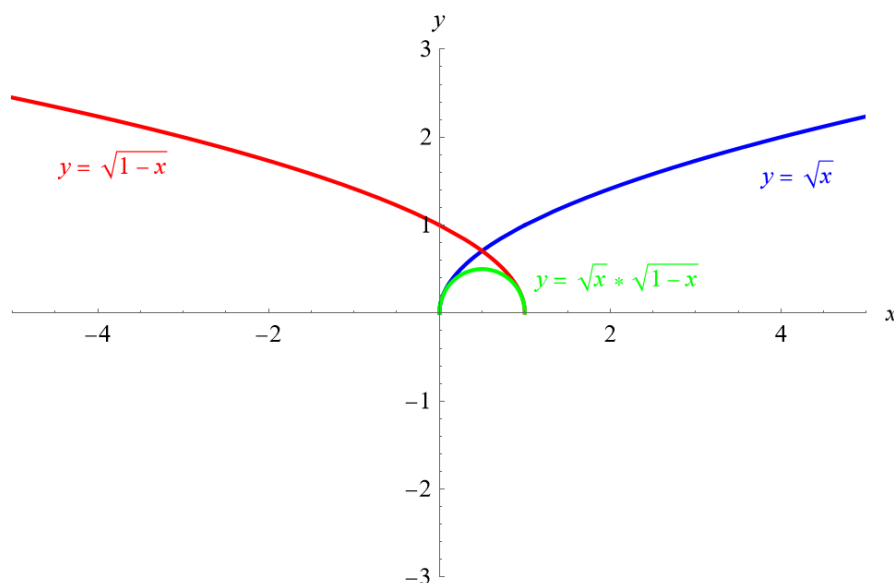
#### Part (a)

Below is a graph of  $f(x) = \sqrt{x}$  and  $g(x) = \sqrt{1-x}$  together with their sum.



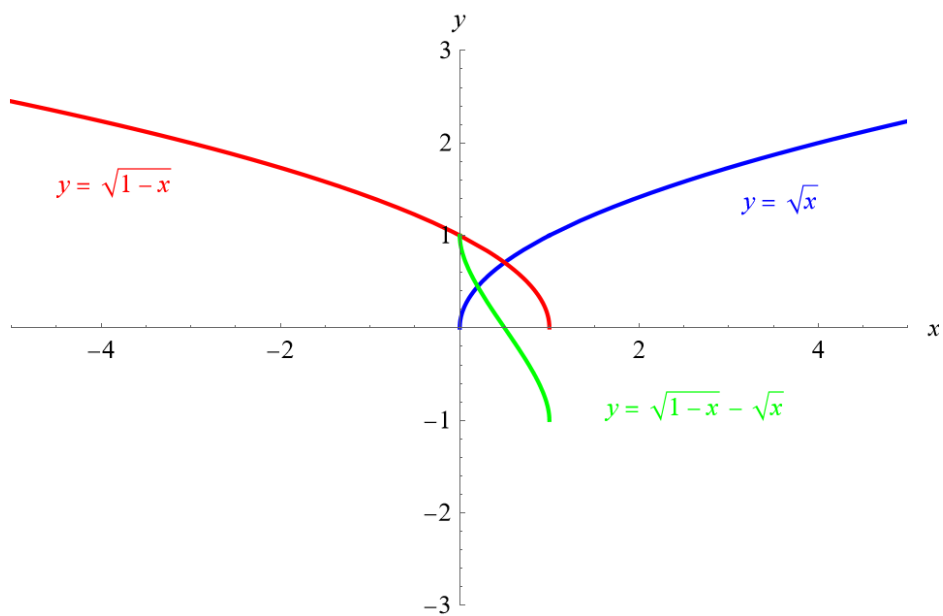
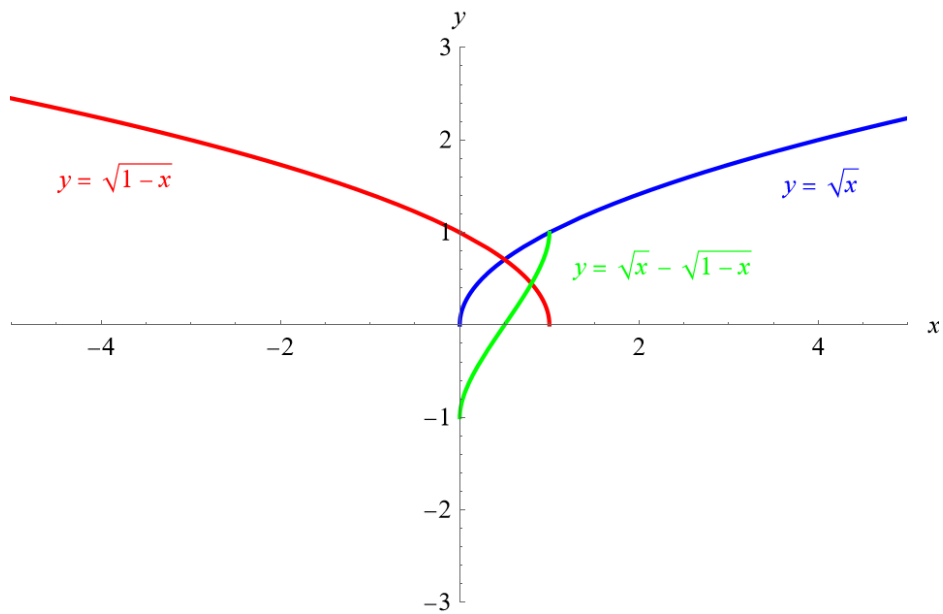
#### Part (b)

Below is a graph of  $f(x) = \sqrt{x}$  and  $g(x) = \sqrt{1-x}$  together with their product.



**Part (c)**

Below are graphs of  $f(x) = \sqrt{x}$  and  $g(x) = \sqrt{1-x}$  together with their two differences.



**Part (d)**

Below are graphs of  $f(x) = \sqrt{x}$  and  $g(x) = \sqrt{1-x}$  together with their two quotients.

