This quiz has 2 questions, for a total of 10 points.

1. **3 points** What is the output of the following program given the input 2?

   ```python
   from math import sqrt
   def square(x):
       return x * x
   x = input() + 1
   if 0 < x:
       z = sqrt(square(x + 1) + square(x))
   else:
       z = x + 2
   print z
   
   Solution:
   
   5.0
   ```

2. **7 points** Convert the above program to an equivalent program that does not contain any complex operators or operands nested inside of expressions or the conditional part of an if statement. An expression is complex if it is not simple. The simple expressions include only variables and constants.

   ```python
   from math import sqrt
   def square(x):
       t0 = x * x
       return t
   t1 = input()
   x = t1 + 1
   t2 = 0 < x
   if t2:
       t3 = square(x)
       t4 = x + 1
       t5 = square(t4)
       t6 = t5 + t3
       z = sqrt(t6)
   else:
       z = x + 2
   print z
   ```