Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Math 3626: Quiz 1**

1. Describe in words what the following Mathematica functions do:
   1. **Table**

* 1. **Map**

* 1. **Do**

1. Write Mathematica code to do the following:
   1. Generate a list of integers that are multiples of 3, from 3 to 33

* 1. Suppose a function **UnitVectorAtAngle** takes as input an angle t and produces as output the coordinates of a 2D unit vector with that angle t:  
       
      UnitVectorAtAngle[t\_] := { Cos[t], Sin[t] }  
       
     Apply the function **UnitVectorAtAngle** to the list of angles 0, Pi/2, Pi, and 3 Pi/2 and show the output of your code.

* 1. Use the **Do** function to print out a list of numbers from 1 to 10 together with each square and cube