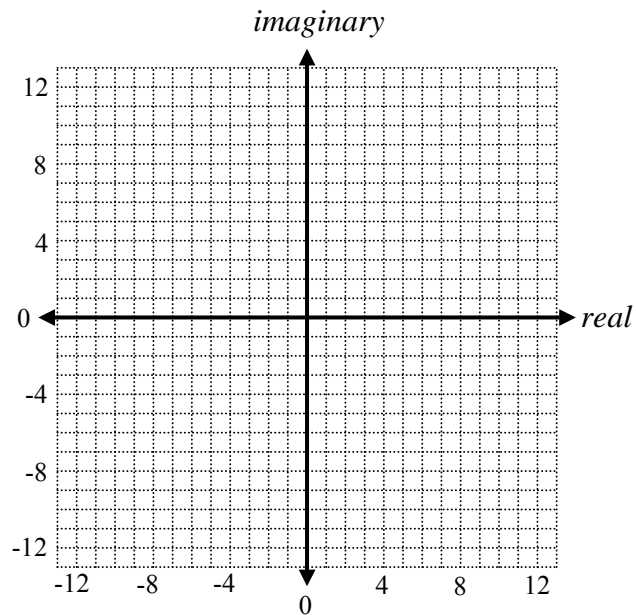CN.5

11.   Given the complex number $z = 2 (\cos\left(\dfrac{\pi}{4}\right) + i \sin\left(\dfrac{\pi}{4}\right))$, evaluate z^2 and plot the

result on the graph given below.

VM.6

24.　A baker wants to use a matrix to record the number of batches of different baked goods she sells.

　　Week 1-　　The baker sold 3 times as many cupcakes as cookies.

　　Week 2-　　The baker sold 60% of the number of batches of cookies sold in week 1, and 40% of the number of batches of cupcakes sold in week 1.

　　Week 3-　　The number of batches of cookies sold in week 3 equaled the total of cookies sold in week 1 and week 2. The number of cupcakes sold in week 3 is 300% of the cupcakes sold in week 2.

Use the information above to choose the correct numbers from the box to complete the matrix.

90	17	180	50	30	80	150	53	40	60

```
                  Week 1    Week 2    Week 3
              ┌                              ┐
  cookies     │                              │
              │                              │
  cupcakes    │                              │
              └                              ┘
```