Name: $\qquad$

# Lesson 1.06 <br> Deep Dive: Constructions 

Geometry GT

## Task \#1

The figure below is a square inscribed in a circle. Use straightedge and compass moves to construct a square that fits perfectly outside the circle, so that the circle is inscribed in the square.


Write precise instructions for constructing a square that fits outside the circle.

## Task \#2

Scenario: The Delectable Diner has three locations in Square City. The owner wants to divide the city into three regions so that whenever an online order is placed, it is sent to the store closest to the customer.


Partition the city into the three regions using a straightedge and compass. Color the three regions with different colors. How do you know your partitioning is accurate?

If all there are 100 total employees working for The Delectable Diner, estimate how they should be distributed between the three locations.

Is there any spot in the city that has the same distance from all three stores?

| Areas for Improvement | Standards and Criteria | Areas of Excellence |
| :--- | :---: | :--- |
|  | Reason abstractly and <br> quantitatively |  |
|  | Describe why certain geometric <br> concepts are true and apply the <br> ideas to specific scenarios. |  |
|  | Use appropriate tools <br> strategically |  |
|  | Accurately use a straightedge <br> and compass to construct the <br> appropriate figures. |  |
|  | Attend to precision <br> Use precise mathematical <br> language writing instructions <br> and utilize accurate definitions. |  |

