

7. [8 points] On the axes provided below, sketch the graph of **one function** $y = g(z)$ satisfying all of the following:

- The domain of $g(z)$ is the interval $(-10, 10)$.
- The range of $g(z)$ includes the number 5.
- $g(0) = -4$ and $g(-7) = 0$
- $g(z)$ has exactly one zero.
- $g(z)$ is increasing and concave down for $-10 < z < -5$.
- $g(z)$ is decreasing for $-5 < z < 0$.
- $g(z)$ has a constant average rate of change for $5 < z < 10$.

Please make sure that your sketch is large, well-labeled, and unambiguous.

