3. [6 points] Sarah is making a bowl on a pottery wheel with a fixed amount of clay. The height of the bowl and the thickness of the walls are related by the following equation:

$$25 = w^2(h^2 + 9),$$

where h is the height of the bowl in inches and w is the thickness of the walls of the bowl in inches. When the bowl is 4 inches tall, the height is increasing at a rate of 0.5 inches per second. How fast is the thickness of the walls changing? Is the thickness increasing or decreasing? **Include units.**

Answer: (circle one)   INCREASING   DECREASING   at a rate of _____