1. (5 points) Find the linear-to-linear rational function \( f(x) = \frac{ax + b}{x + c} \) such that:

\[ f(0) = 0, f(10) = 10, \text{ and } f(20) = 15. \]

2. (5 points) Consider the figure below. If \( s = 3 \) meters, and \( \theta = 1.2 \), what is the area of the shaded sector?