Consider the problem of designing a camera for a Venus rover: the Venusian atmosphere is about 100 times thicker than the Earth's atmosphere, so the index of refraction deviates noticeably from one: $n = 1.04$. The camera lens ($n = 1.5$) is supposed to take the parallel rays from a distant scene and focus them on the electronic film. In this problem you will ray-trace rays that hit near the circumference of the $R = 2$ cm lens. As diagrammed below, that portion of the lens can be considered a 10° prism. A bit of geometry shows the following relations among the angles: $a = 5°$ (because that side of the lens is angled 5° from vertical), $c = 10° - b$ (because a triangle says: $(90° - b) + (90° - c) + 10° = 180°$ — directly on this sheet draw/label where that triangle can be found), and $e = d - 5°$ (because that side of the lens is angled 5° from vertical). Tests in Earth's atmosphere find a focal length (where this edge ray hits the center line) of 22.71 cm; What do you calculate as the focal length in Venus's atmosphere? (Report your results for the angles a, b, c, d, e.)