Solution (#517) Note

$$|\mathbf{r}(\lambda) - (1, 1, 6)|^2 = 20(\lambda - 1)^2 + 21.$$

Solution (#517) Note $|\mathbf{r}(\lambda) - (1, 1, 6)|^2 = 20 (\lambda - 1)^2 + 21.$ which has minimum $\sqrt{21}$, achieved at $\mathbf{r}(1) = (-3, -1, 5)$.