1. Predict the enone product, under thermodynamic control, with detailed reasonings.

$$\begin{array}{c} & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

2. Identify "X" and propose a detailed mechanism.