Astronomy Star Trails Exit Ticket

Base your answers to the following questions on a camera that was placed outside at night and pointed directly at Polaris and several other stars for three nights. The lens was kept open and a time-exposure photograph was taken each night. The diagrams below represent the photographs of Polaris and star trails, with an angular protractor to measure apparent motion each night.

1. Which photo was taken with the lens of the camera left open for 7 hours (A, B, or C)? ______________ (1 pt)

2. Explain your answer to Question #1. Your answer must include quantitative values (numbers and units). (3 pts)

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Name: ________________________ Per _____ Date _____