Chapter 9 Review Task Answers

Triathlon

1. about 3.6 km; Pythagorean Theorem
2. $\frac{8\sqrt{3}}{3} \approx 4.62$ km; special $30°\text{-}60°\text{-}90°$ triangle
3. about 6.78 km; Law of Sines
4. about 7.36 km; Law of Sines
5. about 10.66 km; Law of Cosines

Baseball

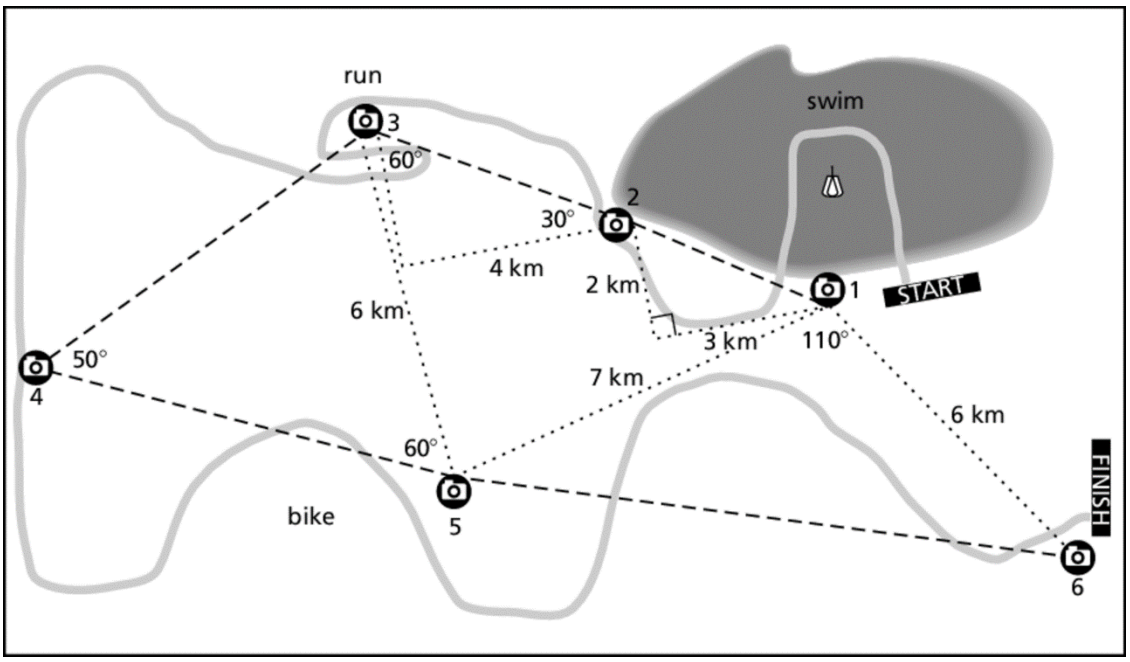
1. Pitcher to home base – 60.5 ft (given)
2. Pitcher to 1st base – 63.717 ft (law of cosines)
3. Pitcher to 2nd base – 66.779 ft (diagonal of square minus the distance to home plate)
4. Pitcher to 3rd base – 63.717 ft (law of cosines)

Name _____ Date _____

Chapter 9 Performance Task (continued)

Triathlon

There is a big triathlon in town, and you are trying to take pictures of your friends at multiple locations during the event. How far would you need to walk to move between the photography locations?



You are going to travel along the dashed path from Station 1 through Station 6. Use the information provided to find the distances between each photography spot. Name the theorem or property used and show how you found your answer.