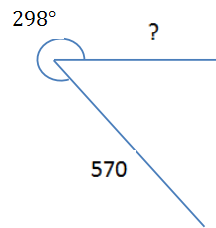


An airplane travels at 190.0 km / h for exactly 3 hr on a bearing of 298 degrees from St. Louis. At the end of this time, how far west of St. Louis is the plane?



- 1) Find inside corner:
 $360 - 298 = 62(\text{degree})$
- 2) Calculate distance that plane flights
 $190 * 3 = 570(\text{km})$
- 3) Calculate how far west is plane
 $570 \cdot \cos(62^\circ) = 267.6(\text{km})$

Answer: 267.6 km.