

World War II and the Pythagorean Theorem.
(Hypothetical Situations, but World War II themed)

1. When the US military leaders were planning on storming Normandy they were looking at two towns to go to next, Alencon or Chartres. The distance from Normandy to Alencon is 40 miles. The distance from Alencon to Chartres is 75 miles. There is a 90 degree at the point near Alencon. What is the distance from Normandy to Alencon and which town would be faster to go to?
2. When the US military troops had infiltrated far into Germany intel reached that there was an operational concentration camp in the German town of Weimar. US troops were stationed in a liberated German town of Bonn. The troops were originally ordered to go to Magdeburg. The distance from Bonn to Weimar is 235 miles. The distance from Weimar to Madegeburg is 112 miles. There is a 90 degree at the point near Weimar. What is the distance from Bonn to Magdeburg?

3. Find three cities on each map below that make a shape similar to a right triangle. Find the length between two of the cities and then use the Pythagorean Theorem to find the third.
- a.



b.



c.