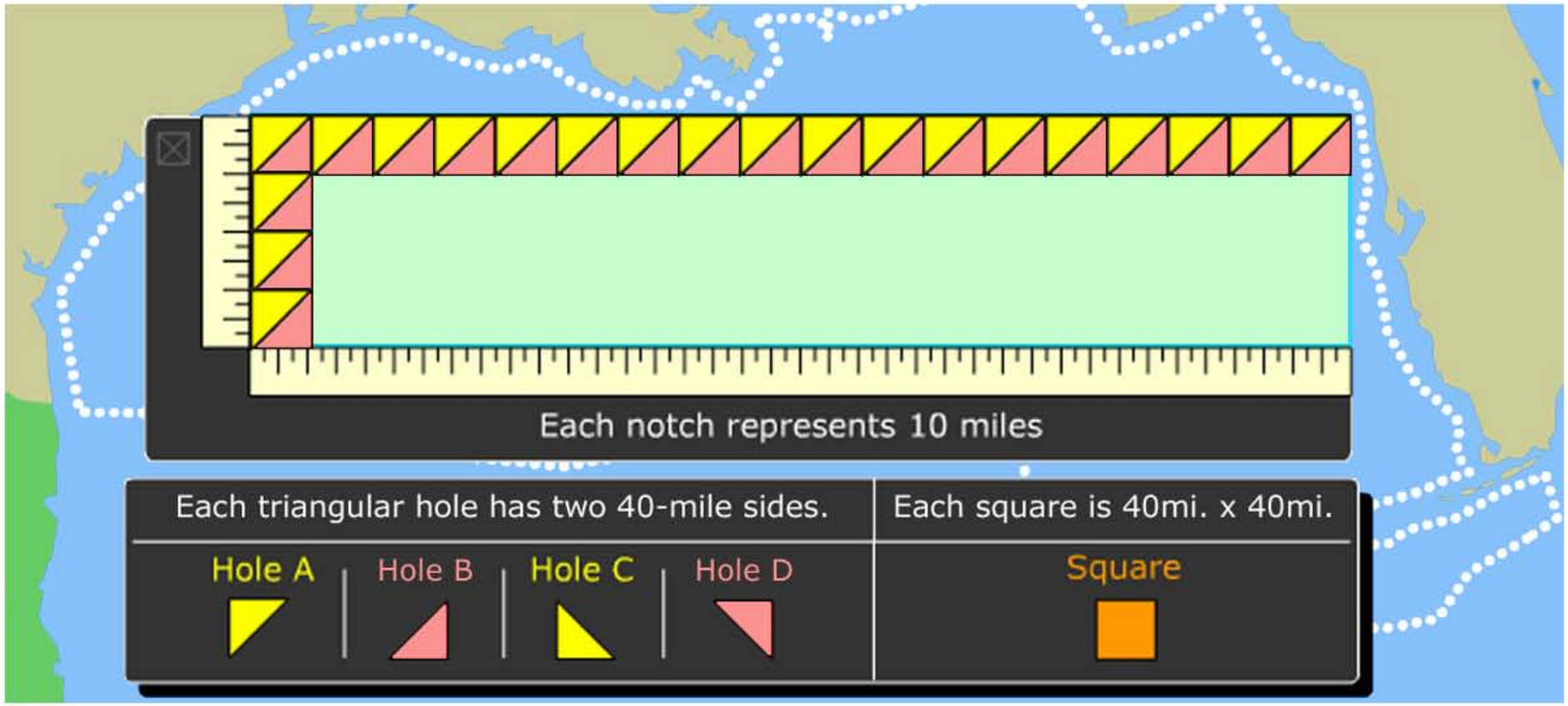
Field Log - How Many Holes on the Course - Answer Key

Step 1:

Dr. Wick wants to know how many of his triangular hole designs can fit on his golf course. Use the shapes and ruler in the map below to find how many triangular holes can fit on the course. You can draw on the map if you need to!



Explain how you are calculating the number of holes that will fit on the lines below.

Answers will vary. Some students will cover the entire space with triangles. Others will lay triangles along only the length and/or width (as shown above) and then multiply the number per row/column by the total number of rows/columns (i.e. 38 triangles per row x 4 rows). Still others will solve algebraically, dividing the length of a side (760, 160) by the base/height of a hole (40 miles). Students **can not** simply multiply the number of triangles per row by triangles per column - this equals 304 holes - twice as many as actually fit.

Step 2:

Report the total number of triangular holes you can fit on Dr. Wick's golf course.

Total Number of Holes: 152

Sum it Up:

Brainstorm a list of the different ways you could figure out how many triangles would fit on the course.

See explaination above for ideas.