Sunridge Secondary School's Superhero Sprint

Each year, the Grade 8 students at Sunridge Secondary School organize a fun-run fundraiser for a local summer camp for children with chronic illnesses. Typically, approximately 60 students participate in the run.

Your task has two parts:

Determine the route and the number of volunteers required along the run Establish the minimum amount that must be fundraised for a student to participate.

- The route must be a loop between 2 km and 3 km long;
- It must start and end at the same spot;
- If the runners must cross the street, an adult volunteer must be assigned to the intersection;
 and
- If runners turn a corner but do not cross, a student volunteer must be assigned there.

A map is included inside your assessment booklet.

- The run is almost entirely paid for by sponsorships and donations;
- The money raised by participants has to cover the cost of t-shirts for all volunteers;
- Each t-shirt costs \$8; and
- All money leftover is given to the camp.



- What you need to include in your solution:
- A sketch of the fun-run route, using arrows to show direction;
- The calculation of the approximate distance;
- The placement of each volunteer;
- The total number of adult and student volunteers required along the route;
- The calculations to find the total cost of all the t-shirts;
- Your decision about the minimum amount of money someone needs to fundraise to participate; and
- A brief (4-6 sentence) explanation of how you determined this minimum amount and why you think it is reasonable.