## ZONBBIE APOCALYPSE!

The world has been overrun by flesh-eating zombies! While most zombies crave human brains, these zombies have an all-consuming hunger for ham! The zombies are marching towards the last hog farm. The military and law enforcement are making a last-ditch effort to save our precious pork products.


The last hog farm covers a rectangular area about 200 meters by 400 meters. What is the perimeter of the area that the army is going to have to protect?

The army decides to erect a gigantic electric fence around the farm. How many square meters of fencing are they going to need to make a fence 3 meters high along the perimeter?


One of the solders suggests digging a big trench filled with burning oil around the area. Apparently, they saw something like this done on TV once. The army digs a 5-meter-wide moat that starts 10 meters away from the perimeter of the farm. How many square meters is the burning area going to cover?

The zombies are here! An enormous horde approaches that covers a $1 \times 2$ kilometer rectangular area. If there is about one zombie per square meter, how many zombies are approaching? Hint: 1 kilometer = 1000 meters.

The zombies break through the defenses without much trouble and get ready for dinner! The hog farm houses one pig for every 2 square meters of the farm's area. How many pigs are the zombies going to be chowing down on? Do you think there will be enough to go around? Why or why not?


