THE MUTANT ZONE

Grood and his band of scavengers are traveling through the ruins of Cincinnati in search of treasure. The city is in the center of the so-called "Mutant Zone." It's dangerous, but that's where all the good stuff is!



The scavengers consult a color-coded map of the city. On the map, 3/16th is colored red, meaning that the area is inhabited by bloodthirsty savages. Another 4/16 is colored black, meaning that these sectors are infested with deadly mutant wildlife. Finally, 2/16 is marked green, meaning that the area is covered in toxic chemicals and radiation. What fraction of the map is unmarked?

Grood's team finds what looks to be an old shopping mall. Unfortunately, it also appears to be a gathering site for Manphibians. Although these runty pests are not dangerous by themselves, they can be a real threat in large numbers. The frog-like Manphibians are arriving at a rate of 12 per minute. The scavengers figure they can hunt for loot safely until about 240 Manphibians arrive. How long do they have to search?

Combing through an old pet store, the scavengers hit paydirt and find a large bag of dog food! As luck would have it, 3/4 of the bag is still unspoiled! The five scavengers decide to split up the unspoiled food evenly so that everyone gets 1/5th. How much of the bag does each scavenger get?

One of the scavengers hears a rumbling. Before he can even turn around, a giant raccoon bursts out of the ground and swallows him whole! The rest of the group runs for it! They decide to head for a rickety bridge that looks too weak for the raccoon to cross. The bridge can support about 1000 pounds before it will collapse. The four remaining scavengers weigh about 220 pounds each. Will they be able to cross safely?



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