

## Cleaning Questions



Two Math Cats

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Orange and Grey want to mix a few bottles of 70% cleaning solution. Calculate how many fluid ounces of alcohol are needed in the final solution, and the amount of 91% alcohol they must add to reach that amount.

Bottle Size (fl oz).	Alcohol Required (fl oz)	91% solution (fl oz.)
10	7	7.692
15		
25		
40		

2. In order to properly clean their paws, Orange and Grey are making paw sanitizer. The Cat Disease Control (CDC) has issued statements saying all sanitizers must contain over 60% alcohol to be effective. So, they will be making alcohol based hand sanitizers with their 91% alcohol solution and aloe vera gel. Fill out the table to find out how much of each supply they will need.

Bottle size (fl oz).	Alcohol Concentration (%)	Alcohol (fl oz)	Aloe vera Gel (fl oz).
10	60	6.593	3.407
25	60		
10	75		
25	75		
30	80		

\*Please exercise caution when mixing alcohol products as overexposure can damage your skin. Be careful to avoid the eyes and mouth. Have an adult aid you.