Math 1435 – Volume, chemical mix and glue Calculations

# Practice Problems

1. You are mixing a sealer for your project. The mixture calls for 3 parts varnish to 1 parts varsol. How much of each chemical do you need if you require a total of 750ml of sealer?
2. You are making a piece of furniture that will be finished with an oil rubbed finish. You will require 5.1L total of finish to complete the job. How much of each ingredient will you need to end up with the total volume? The receipt calls for 5 parts varnish, 3 parts varsol, and 4 parts mineral oil.

## Given the mix ratio below, calculate the following glue requirements.

1. We are pressing 50 – 3 ply panels that are 74” x 28”. What is the total amount of glue by weight needed for this job?
2. The next job at the hot press is for 175 – 5 ply panels that are 40” x 16”. What is the total amount of glue by weight needed?
3. The next job at the hot press is for 220 – 7 ply panels that are 38” x 24”. What is the total amount of glue by weight needed?
4. We have calculated the total required amount of glue for our next hot press job to be 9750 grams of glue. Calculate the amount of resin, catalyst and water needed for this job.
5. We have calculated the total required amount of glue for our next hot press job to be 890 grams of glue. Calculate the amount of resin, catalyst and water needed for this job.
6. We have calculated the total required amount of glue for our next hot press job to be 10,230 grams of glue. Calculate the amount of resin, catalyst and water needed for this job.

# Hot Press Glue details

*Mix ratio:*

Resin – 20 parts

Catalyst – 4 parts

Water – 1 part

Waste: 10% Coverage: 20g/sqft