Methodology: volume displacement. Initial mass of walnut flour weighed on analytical balance and initial volume of water measured in 25mL graduated cylinder. Combined in a 100mL beaker and poured into graduated cylinder (had to measure in multiple portions due to total fluid volume exceeding 25mL)

WF-100

Initial mass: 8.01444g

Water: 15.4 + 17.6 + 4.5 ml = 37.5 mL

Total volume = 21.6 + 21.0 = 42.6 mL

Displacement = 42.6 - 37.5 = 5.1mL

Density = 8.01444g / 5.1 mL = **1.57 g/mL**

WF-200

Initial mass: 10.8935g

Water: 22.0 + 19.6 + 3.0 mL = 44.6 mL

Total volume = 21.3 + 23.6 + 6.8 mL = 51.7mL

Displacement = 51.7 - 44.6 = 7.1mL

Density = 10.8935g / 7.1 mL = **1.53 g/mL**

WF-325

Initial mass: 8.443g

Water: 22.5 + 6 + 21.7 mL = 50.2 mL

Total volume = 25.0 + 19.4 + 11.4 mL = 55.8mL

Displacement = 55.8 - 50.2mL = 5.6 mL

Density = 8.443g / 5.6 mL = **1.51 g/mL**