

### Answer on Question #46312 – Math – Geometry

find the volume of a trough at the form of a prism whose opposite face are equilateral triangle with side side  $x$  units and are  $x$  units apart

**Solution.**

The area of an equilateral triangle with side  $x$  equals  $S = \frac{\sqrt{3}}{4} x^2$ .

Thus the volume of a trough equals  $V = Sh = \frac{\sqrt{3}}{4} x^2 * x = \frac{\sqrt{3}}{4} x^3$ .