Sound travels 4x faster in water than air, WHY ?

General equation for speed of sound:

$$c = \sqrt{\frac{K}{\rho}}$$

Where ρ – density, K - bulk modulus.

$$\frac{c_w}{c_a} = \sqrt{\frac{K_w \rho_a}{\rho_w K_a}}$$

At 20 °C:

$$\frac{c_w}{c_a} = \sqrt{\frac{2.2 * 10^9 Pa * 1.2 kg/m^3}{1000 kg/m^3 * 1.42 * 10^5 Pa}} \cong 4.3$$

Sound travels faster in water than in air due to relations between water's and air's parameters.