

$x^3 - 1,000 = x^3 - 10^3$, and a binomial in the form $a^3 - b^3$ can be factored as $(a - b)(a^2 + ab + b^2)$. The missing number is the value of b^2 , but you found b^3 . Whenever you factor, remember to check your answer by multiplying the factors back together.