

$x^3 - 216 = x^3 - 6^3$ , 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.