Name ANSWER KEY Date _____

Solve Cube Root Equations

Directions: Solve each equation for the variable. If the given number is not a perfect cube, write your answer using the cube root symbol.

1) $h^3 = 27$ $h = 3$	2) $v^3 = 8$ $v = 2$	3) $f^3 = -64$ $f = -4$
4) $t^3 = 18$ $t = \sqrt[3]{18}$	5) $x^3 = -1$ $x = -1$	6) $d^3 = 30$ $d = \sqrt[3]{30}$
7) $j^3 = -216$ $j = -6$	8) $y^3 = -100$ $y = \sqrt[3]{-100}$	9) $a^3 = -343$ $a = -7$
10) $b^3 = -1{,}728$ $b = -12$	11) $r^3 = 1{,}331$ $r = 11$	12) $n^3 = 128$ $n = \sqrt[3]{128}$ (or $4\sqrt[3]{2}$)
13) $p^3 = 54$ $p = \sqrt[3]{54}$ (or $3\sqrt[3]{2}$)	14) $w^3 = 15{,}625$ $w = 25$	15) $m^3 = -3{,}375$ $m = -15$
16) $z^3 = 250$ $z = \sqrt[3]{250}$ (or $5\sqrt[3]{2}$)	17) $g^3 = -8{,}000$ $g = -20$	18) $c^3 = 64{,}000$ $c = 40$