

The following cubes should be memorized (at least through 20^3):

$1^3 = 1$	$2^3 = 8$	$3^3 = 27$	$4^3 = 64$	$5^3 = 125$
$6^3 = 216$	$7^3 = 343$	$8^3 = 512$	$9^3 = 729$	$10^3 = 1000$
$11^3 = 1331$	$12^3 = 1728$	$13^3 = 2197$	$14^3 = 2744$	$15^3 = 3375$
$16^3 = 4096$	$17^3 = 4913$	$18^3 = 5832$	$19^3 = 6859$	$20^3 = 8000$
$21^3 = 9261$	$22^3 = 10648$	$23^3 = 12167$	$24^3 = 13824$	$25^3 = 15625$

There are some numbers in which you should memorize even higher powers:

$2^4 = 16$	$2^8 = 256$	$3^4 = 81$	$4^5 = 1024$
$2^5 = 32$	$2^9 = 512$	$3^5 = 243$	$5^4 = 625$
$2^6 = 64$	$2^{10} = 1024$	$3^6 = 729$	$6^4 = 1296$
$2^7 = 128$	$2^{11} = 2048$	$4^4 = 256$	$7^4 = 2401$