

Name: _____

Score: _____

Exponents

ES1

Find the value of x to balance the equation.

1) $x^3 = 343$ $x =$ _____	2) $1024 = 2^x$ $x =$ _____	3) $512 = x^3$ $x =$ _____
4) $729 = 3^x$ $x =$ _____	5) $225 = x^2$ $x =$ _____	6) $x^3 = 1331$ $x =$ _____
7) $x^2 = 196$ $x =$ _____	8) $625 = x^4$ $x =$ _____	9) $1024 = 4^x$ $x =$ _____
10) $32 = 2^x$ $x =$ _____	11) $x^3 = 729$ $x =$ _____	12) $1728 = x^3$ $x =$ _____
13) $x^4 = 1296$ $x =$ _____	14) $1000 = x^3$ $x =$ _____	15) $256 = 2^x$ $x =$ _____
16) $243 = 3^x$ $x =$ _____	17) $x^2 = 169$ $x =$ _____	18) $216 = x^3$ $x =$ _____
19) $64 = x^2$ $x =$ _____	20) $125 = 5^x$ $x =$ _____	21) $x^2 = 49$ $x =$ _____

Name: _____

Answer key

Score: _____

Exponents

ES1

1) $x^3 = 343$ $x = 7$	2) $1024 = 2^x$ $x = 10$	3) $512 = x^3$ $x = 8$
4) $729 = 3^x$ $x = 6$	5) $225 = x^2$ $x = 15$	6) $x^3 = 1331$ $x = 11$
7) $x^2 = 196$ $x = 14$	8) $625 = x^4$ $x = 5$	9) $1024 = 4^x$ $x = 5$
10) $32 = 2^x$ $x = 5$	11) $x^3 = 729$ $x = 9$	12) $1728 = x^3$ $x = 12$
13) $x^4 = 1296$ $x = 6$	14) $1000 = x^3$ $x = 10$	15) $256 = 2^x$ $x = 8$
16) $243 = 3^x$ $x = 5$	17) $x^2 = 169$ $x = 13$	18) $216 = x^3$ $x = 6$
19) $64 = x^2$ $x = 8$	20) $125 = 5^x$ $x = 3$	21) $x^2 = 49$ $x = 7$