|  |  |
| --- | --- |
| Law | Example |
| x1 = x | 61 = 6 |
| x0 = 1 | 70 = 1 |
| x-1 = 1/x | 4-1 = 1/4 |
|  |  |
| xmxn = xm+n | x2x3 = x2+3 = x5 |
| xm/xn = xm-n | x6/x2 = x6-2 = x4 |
| (xm)n = xmn | (x2)3 = x2×3 = x6 |
| (xy)n = xnyn | (xy)3 = x3y3 |
| (x/y)n = xn/yn | (x/y)2 = x2 / y2 |
| x-n = 1/xn | x-3 = 1/x3 |
| And the law about Fractional Exponents: |
| http://www.mathsisfun.com/algebra/images/nth-root-xm.gif | http://www.mathsisfun.com/algebra/images/3rd-root-x2.gif |

Exponent Rules

Directions: After today’s exploration with Exponents, use these rules to help you solve the problems.