**Properties of Exponents: Multiplication**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Level 1*** | ***Solutions*** |  | ***Level 3*** | ***Solutions*** |
| a2 • a7 |  |  | g5 h5 • g10 h7 |  |
| b9 • b10 |  |  | i9 j20 • i2 j-4 |  |
| c11 • c12 • c2 |  |  | k4 l2 • k4 l4 • k2 l9 |  |
|  |  |  |  |  |
| ***Level 2*** | ***Solutions*** |  | ***Level 4*** | ***Solutions*** |
| d2 • d-4 |  |  | m3 n5 o2 • m6 n-8 o2 |  |
| e9 • e9 • e |  |  | p2 q3 r4 • p q r |  |
| f-10 • f-3 |  |  | s2 t-15 u • t8 u-8 s-2 |  |

 **Properties of Exponents: Division**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Level 1*** | ***Solutions*** |  | ***Level 3*** | ***Solutions*** |
| a7 ÷ a2 |  |  | g5 h5 / g10 h7 |  |
| b19 ÷ b10 |  |  | i9 j20 / i2 j-4 |  |
| c12 ÷ c11 |  |  | k4 l2 / k4 l4 |  |
|  |  |  |  |  |
| ***Level 2*** | ***Solutions*** |  | ***Level 4*** | ***Solutions*** |
| d2 ÷ d-4 |  |  | m3 n5 o2 / m6 n-8 o2 |  |
| e9 ÷ e9 |  |  | p2 q3 r4 / p q r |  |
| f-10 ÷ f-3 |  |  | s2 t-15 u / t8 u-8 s-2 |  |

**Properties of Exponents: Multiplication**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Level 1*** | ***Solutions*** |  | ***Level 3*** | ***Solutions*** |
| a2 • a7 | a9 |  | g5 h5 • g10 h7 | g15 h12 |
| b9 • b10 | b19 |  | i9 j20 • i2 j-4 | i11 j16 |
| c11 • c12 • c2 | c25 |  | k4 l2 • k4 l4 • k2 l9 | k10 l15 |
|  |  |  |  |  |
| ***Level 2*** | ***Solutions*** |  | ***Level 4*** | ***Solutions*** |
| d2 • d-4 | d-2 |  | m3 n5 o2 • m6 n-8 o2 | m9 n-3 o4 |
| e9 • e9 • e | e19 |  | p2 q3 r4 • p q r | p3 q4 r5 |
| f-10 • f-3 | f-13 |  | s2 t-15 u • t8 u-8 s-2 | t-7 u-7 |

 **Properties of Exponents: Division**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Level 1*** | ***Solutions*** |  | ***Level 3*** | ***Solutions*** |
| a7 ÷ a2 | a5 |  | g5 h5 / g10 h7 | g-5 h-2 |
| b19 ÷ b10 | b9 |  | i9 j20 / i2 j-4 | i7 j24 |
| c12 ÷ c11 | c (c1) |  | k4 l2 / k4 l4 | l-2 |
|  |  |  |  |  |
| ***Level 2*** | ***Solutions*** |  | ***Level 4*** | ***Solutions*** |
| d2 ÷ d-4 | d6 |  | m3 n5 o2 / m6 n-8 o2 | m-3 n13 |
| e9 ÷ e9 | 1 (e0) |  | p2 q3 r4 / p q r | pq2 r3 |
| f-10 ÷ f-3 | f-7 |  | s2 t-15 u / t8 u-8 s-2 | s4 t-23 u9 |