

ESERCIZI SVOLTI: ESPONENTI LETTERALI

1. $(a^n)^{m+n} =$ $(a^{n+2m})^3 =$ $(a^{n+2})^4 =$

$(a^{n+2})^4 =$ $(a^{2n+3})^3 =$ $(-a^3)^{2(n+n)} =$

2. $[(a^{3+2n})^3 : (a^{n+1})^3]^4 : (a^{2+n})^3 =$

3. $(b^{3+2n+n^2})^2 : (b^{2n})^{n+1} : [(b^{2n+3})^n : (b^{1+n})^{2n}] =$

4. $(x^{2n+3})^{n+1} =$

5. $(x^{n+2m})^{m+n} =$

6. $[(x^{1+n})^2]^n =$

7. $\frac{(a^{6n+1})^{2n+3} : (a^{2n+3})^2}{(a^n)^{2n+3}} : (a^{5n+1})^{2n+1} =$

8. $\frac{(a^{2n-1})^2 \cdot (a^{3+n})^2 : a^{n-2}}{(a^n)^2 : a^{n-5}} + \frac{(a^{n-3})^{n-2}}{(a^n)^{n-5} \cdot a^4} - \frac{a^{n+4}}{a^{2+n}} =$

9. $\left\{ \frac{(a^2)^{n+3} \cdot (a^3)^{n+3} : a^{3n+8}}{a^{n+3} \cdot a^{n+6} : a^4} + \frac{(a^{n+2})^{n+3} \cdot a^2}{(a^{n+5})^n \cdot (a^2)^3} + \frac{a^{7+n}}{a^{n+5}} \right\}^2 =$

10. $\left\{ \frac{(a^{2n-1})^{-3} : a^{-n^2} \cdot (a^5)^n}{(a^n)^{n-1}} + \frac{a^{n+4}}{a^{n+1}} \right\}^6 = \left\{ \frac{a^{-6n+3} : a^{-n^2} \cdot a^{5n}}{a^{n^2-n}} + a^{n+4-(n+1)} \right\}^6 =$

11. $\frac{(3x^n - 2y^n)(x^n + 2y^n) - (3x^n + y^n)(x^n - 2y^n) - 3y^n(3x^n - y^n)}{\left[\left(-\frac{1}{2} a^{6n} x^{4n} \right)^2 : \left(-\frac{1}{2} a^{2n} x^n \right)^3 + 2a^{2n} x^{3n} \cdot (-a^{4n} x^{2n}) \right]^2 : (-4a^{6n} x^{5n})^2} =$