

Multiplicaciones y divisiones de Potencias

1) $(x)^4 (x)^7 =$

$$x^4 \times x^7 = x^{11}$$

2) $(6^4)(6^{-4}) =$

$$6^4 \times 6^{-4} = 6^4 \times \frac{1}{6^4} = \frac{1296 \times 1}{1296} = 1$$

3) $(5b^4)(5b^5) =$

$$(5 \times 5) b^4 b^5 =$$

$$25 b^4 b^5 = 25 b^9$$

4) $(7^4)(7^2) =$

$$7^4 \times 7^2 = 7^6$$

$$117649$$

5) $(-3)^2(4)^2(-5)^2 =$

$$3^2 \times 4^2 \times (-5)^2 = 144 \times 25 = 3600$$

$$9 \times 16 \times 25 =$$

$$6) \frac{9^6}{9^3} = 9^3$$

$$7) \frac{5^{10}}{5^6}$$

$$9,765,625 \div 5^6 =$$

$$9,765,625 \div 15,625 = \underline{626}$$

$$8) \frac{9^4}{3^4} =$$

$$6,561 \div 3^4 =$$

$$6,561 \div 81 = \underline{81}$$

$$9) \frac{7^9}{7^7} =$$

$$40,353,607 \div 7^7 =$$

$$40,353,607 \div 823,543 = 49$$

$$10) \frac{15^5}{5^5} =$$

$$759,375 \div 5^5 =$$

$$759,375 \div 3125 = 243$$