

Nombre:

Fecha:

1. (1p) Read the powers and their calculated values: $a) 12^2$ $b) 9^3$ $c) 7^4$ $d) 2^5$

2. (1p) Find the number x : $a) x^3 = 125$ $b) 3^x = 81$ $c) x^6 = 64$ $d) 4^x = 256$

3. (1p) Expresa, usando potencias de 10:

- $a)$ Mil seiscientos millones $b)$ Trescientos cuarenta mil millones

4. (1p) Write the number 23709215 in expanded form using powers of ten:

5. (2p) Write as a single power, if possible:

a) $(4^7 \cdot 4^4) \cdot (4^8 \div 4^7)$ b) $2^{15} \div 2^7 \cdot 2^3$ c) $(7^3)^4 \cdot (3^6)^2$ d) $(3^6 \cdot 4^6) \div (18^6 \div 3^6)$

6. (1p) Calculate the value of the following powers: a) 0^1 b) 1^1 c) 1^0 d) 0^0

7. (1p) Read the root and its calculated value: $\sqrt{169}$

8. (1p) Calculate $\sqrt{700}$ (integer root)

9. (1p) You have one hundred and fifty square tiles with sides measuring twenty-five cm. What is the largest square floor space you can cover without cutting any tiles? How many tiles are left?

*. (1p) Escribe: a) 1966 En números romanos b) CDLXXIV en numeración decimal

1. (1p) a) $12^2 = 144$ Twelve squared is one hundred and forty-four.
b) $9^3 = 729$ Nine cubed is seven hundred and twenty-nine
c) $7^4 = 2401$ Seven to the fourth power is two thousand four hundred and one.
d) $2^5 = 32$ Two to the fifth power is thirty-two.
2. (1p) a) $x = 5$ b) $x = 4$ c) $x = 2$ d) $x = 4$
3. (1p) a) $1.600.000.000 = 16 \cdot 10^8$ b) $340.000.000.000.000.000 = 34 \cdot 10^{16}$
4. (1p) $2 \cdot 10^7 + 3 \cdot 10^6 + 7 \cdot 10^5 + 9 \cdot 10^3 + 2 \cdot 10^2 + 1 \cdot 10^1 + 5 \cdot 10^0$
5. (2p) a) 4^{12} b) 2^{11} c) 21^{12} d) 2^6
6. (1p) a) 0 b) 1 c) 1 d) Indeterminate
7. (1p) $\sqrt{169} = 13$ The square root of one hundred and sixty-nine is thirteen.
8. (1p) $26^2 = 676 \Rightarrow \sqrt{700} = 26, R = 700 - 676 = 14$
9. (1p) $12^2 = 144 \Rightarrow \sqrt{150} = 12, R = 6$
You can cover a squared floor with sides $12 \cdot 25 = 300 \text{ cm}$ (3 m).
The squared space is $3^2 = 9 \text{ m}^2$
There are 6 tiles left
- *. (1p) a) CMMLXVI b) 474