

# CÁLCULO MENTAL

Potencias 3

HOJA Nº: \_\_\_\_\_

	A	B	C	D	E	F	G
<b>1</b>	$100^{\frac{1}{2}}$	$\left(\frac{1}{5}\right)^{-1}$	$\left(-\frac{1}{5}\right)^3$	$8^{-2}$	$\left(\frac{1}{6}\right)^2$	$(-3)^3$	$8^{\frac{1}{3}}$
<b>2</b>	$\left(\frac{1}{6}\right)^{-1}$	$\left(-\frac{1}{3}\right)^3$	$\left(\frac{1}{10}\right)^{-1}$	$\left(-\frac{1}{10}\right)^3$	$(-2)^3$	$\left(\frac{1}{8}\right)^{-1}$	$4^{-2}$
<b>3</b>	$-8^2$	$81^{\frac{1}{2}}$	$-6^2$	$49^{\frac{1}{2}}$	$-4^2$	$25^{\frac{1}{2}}$	$-2^2$
<b>4</b>	$\left(\frac{-1}{2}\right)^3$	$\left(\frac{1}{10}\right)^2$	$\left(\frac{1}{7}\right)^2$	$1000^{\frac{1}{3}}$	$\left(\frac{1}{7}\right)^{-1}$	$-3^2$	$\left(\frac{1}{5}\right)^2$
<b>5</b>	$\left(\frac{1}{9}\right)^2$	$9^{-2}$	$27^{\frac{1}{3}}$	$\left(\frac{1}{4}\right)^{-1}$	$5^{-2}$	$\left(\frac{1}{4}\right)^2$	$(-10)^3$
<b>6</b>	$10^{-2}$	$-7^2$	$64^{\frac{1}{2}}$	$-5^2$	$36^{\frac{1}{2}}$	$6^{-2}$	$16^{\frac{1}{2}}$
<b>7</b>	$\left(\frac{1}{6}\right)^0$	$8^{\frac{1}{3}}$	$7^{-2}$	$\left(\frac{1}{8}\right)^2$	$\left(\frac{1}{49}\right)^{-\frac{1}{2}}$	$125^{\frac{1}{3}}$	$\left(\frac{1}{9}\right)^{-1}$
<b>8</b>	$27^{\frac{1}{3}}$	$\left(\frac{1}{25}\right)^{-\frac{1}{2}}$	$\left(\frac{1}{2}\right)^0$	$\left(\frac{1}{81}\right)^{-\frac{1}{2}}$	$64^{\frac{1}{3}}$	$\left(-\frac{7}{10}\right)^2$	$\left(\frac{1}{7}\right)^0$
<b>9</b>	$\left(\frac{1}{4}\right)^{-\frac{1}{2}}$	$\left(\frac{3}{4}\right)^0$	$-\left(\frac{-1}{4}\right)^2$	$(-7)^2$	$\left(-\frac{10}{7}\right)^2$	$\left(\frac{1}{64}\right)^{-\frac{1}{2}}$	$\left(\frac{1}{100}\right)^{-\frac{1}{2}}$
<b>10</b>	$-5^{-1}$	$(-9)^2$	$(-1)^7$	$\left(\frac{1}{3}\right)^0$	$-7^{-1}$	$-8^{-1}$	$(-1)^{17}$
<b>11</b>	$\left(\frac{1}{4}\right)^{-2}$	$-\left(\frac{-1}{3}\right)^2$	$\left(\frac{1}{36}\right)^{-\frac{1}{2}}$	$-\left(\frac{-1}{5}\right)^2$	$\left(\frac{1}{4}\right)^0$	$\left(\frac{1}{5}\right)^0$	$\left(-\frac{7}{2}\right)^2$
<b>12</b>	$\left(\frac{7}{5}\right)^2$	$\left(-\frac{7}{3}\right)^2$	$\left(-\frac{5}{3}\right)^2$	$\left(\frac{5}{7}\right)^2$	$\left(\frac{36}{25}\right)^{\frac{1}{2}}$	$(-1)^{15}$	$-\left(\frac{-1}{8}\right)^2$
<b>13</b>	$\left(\frac{25}{81}\right)^{\frac{1}{2}}$	$-4^{-1}$	$\left(\frac{1}{3}\right)^{-2}$	$\left(\frac{100}{9}\right)^{\frac{1}{2}}$	$\left(\frac{1}{8}\right)^{-2}$	$\left(\frac{49}{4}\right)^{\frac{1}{2}}$	$\left(\frac{4}{9}\right)^2$
<b>14</b>	$\left(-\frac{10}{3}\right)^2$	$\left(\frac{16}{25}\right)^{\frac{1}{2}}$	$\left(\frac{7}{10}\right)^2$	$(-1)^{11}$	$-\left(\frac{-1}{6}\right)^2$	$\left(\frac{1}{6}\right)^{-2}$	$-10^{-1}$
<b>15</b>	$(-1)^9$	$\left(\frac{10}{7}\right)^2$	$\left(\frac{4}{49}\right)^{\frac{1}{2}}$	$\left(-\frac{3}{5}\right)^2$	$(-1)^{13}$	$\left(\frac{3}{5}\right)^2$	$\left(\frac{81}{4}\right)^{\frac{1}{2}}$
<b>16</b>	$(-8)^2$	$(-1)^5$	$(-10)^2$	$-6^{-1}$	$(-11)^2$	$(-4)^2$	$(-2)^4$
<b>17</b>	$-\left(\frac{-1}{2}\right)^2$	$\left(\frac{1}{5}\right)^{-2}$	$\left(\frac{1}{2}\right)^{-1}$	$\left(\frac{1}{2}\right)^{-2}$	$\left(\frac{3}{10}\right)^2$	$-\left(\frac{-1}{7}\right)^2$	$\left(\frac{1}{7}\right)^{-2}$

## Potencias 3 (SOLUCIONES)

SOL	A	B	C	D	E	F	G
1	10	5	-1/125	1/64	1/36	-27	2
2	6	-1/27	10	-1/1000	-8	8	1/16
3	-64	9	-36	7	-16	5	-4
4	-1/8	1/100	1/49	10	7	-9	1/25
5	1/81	1/81	3	4	1/25	1/16	-1000
6	1/100	-49	8	-25	6	1/36	4
7	1	2	1/49	1/64	7	5	9
8	3	5	1	9	4	49/100	1
9	2	1	-1/16	49	100/49	8	10
10	-1/5	81	-1	1	-1/7	-1/8	-1
11	16	-1/9	6	-1/25	1	1	49/4
12	49/25	49/9	25/9	25/49	6/5	-1	-1/64
13	5/9	-1/4	9	10/3	64	7/2	16/81
14	100/9	4/5	49/100	-1	-1/36	36	-1/10
15	-1	100/49	2/7	9/25	-1	9/25	9/2
16	64	-1	100	-1/6	121	16	16
17	-1/4	25	2	4	9/100	-1/49	49

### NIVEL EDUCATIVO:

- 3º ESO
- 4º ESO

### PUNTUACIÓN APROX.

PUNTOS	4	5	6	8	10	13	16	19	21	23
NOTA	1	2	3	4	5	6	7	8	9	10

### INDICACIONES

Con esta hoja trabajaremos:

- Potencias de base y exponente racional.

- Potencias con exponente negativo :

$$a^{-n} = \frac{1}{a^n} \quad \text{y} \quad \left(\frac{a}{b}\right)^{-n} = \left(\frac{b}{a}\right)^n$$

- Potencias con exponente racional :  $a^{1/n} = \sqrt[n]{a}$
- Recordad :  $(-)^{\text{par}} = +$  y  $(-)^{\text{impar}} = -$
- Cuidado:  $(-6)^2 \neq -6^2$

### RESULTADOS

GRUPO: \_\_\_\_\_

	PUNTOS
Media de la Clase	
Máxima de la Clase	

OBSERVACIONES