

4º ESO. RADICALES (HOJA 2)

SOLUCIONES

1. Racionaliza las siguientes expresiones:

| | | | | |
|------------------------------------|---|---------------------------------------|--|---|
| $\frac{3}{2} \sqrt{2}$ | $\frac{2}{3} \sqrt{3}$ | $\frac{1}{3} \sqrt{6}$ | $\frac{3}{4} \sqrt{3} \sqrt{2}$ | $\frac{3}{\sqrt{2-x}}$ |
| $\frac{\sqrt{2-x}}{\sqrt{2+x}}$ | $\frac{6}{3\sqrt{5xy}}$ | $\frac{\sqrt{xy}}{5\sqrt{yz}}$ | $\frac{2\sqrt{xy}}{3\sqrt{3y}}$ | $\frac{\sqrt{2}}{\sqrt[3]{3}}$ |
| $\frac{3}{\sqrt[4]{x^2y}}$ | $\frac{6x}{\sqrt[3]{ab^2x^3}}$ | $\frac{3x+y}{\sqrt[3]{(x-y)^2}}$ | $\frac{3}{\sqrt[4]{(x+y)^5}}$ | $\frac{3x-2y}{\sqrt[3]{3x^2y^4}}$ |
| $-\sqrt{3} - \sqrt{2}$ | $\frac{3}{4}\sqrt{2} + \frac{1}{4}\sqrt{2}\sqrt{5}$ | $-\frac{3}{4}\sqrt{3} + \frac{5}{4}$ | $\frac{\sqrt{x}}{2-\sqrt{x}}$ | $7-4\sqrt{3}$ |
| $2\sqrt{2}\sqrt{3} + 5$ | $\frac{1}{2}\sqrt{2}\sqrt{6}$ | 2 | $\frac{3}{7}\sqrt{2} + \frac{2}{7}$ | $\frac{1}{2}\sqrt{2}\sqrt{3} - \frac{1}{2}\sqrt{2}$ |
| $\frac{6(3-y)}{\sqrt[3]{(3-y)^2}}$ | $-3+2\sqrt{2}$ | $\frac{1}{11}\sqrt{5} - \frac{4}{11}$ | $\frac{19}{11} - \frac{4}{11}\sqrt{5}\sqrt{3}$ | $\frac{\sqrt{xy}}{2\sqrt{x}-3\sqrt{y}}$ |

2. Efectúa:

| | |
|-----------------------------------|--|
| $7\sqrt{3}$ | 0 |
| $6\sqrt{2}$ | $a\sqrt{3}$ |
| $2a\sqrt{2} + \sqrt{2}$ | $-2\sqrt{5} + 2\sqrt{5}a$ |
| $22\sqrt{2}\sqrt{3} - 12\sqrt{2}$ | $\frac{10}{3}\sqrt{3}$ |
| $\frac{11}{2}\sqrt{2}$ | 0 |
| $7\sqrt{5}$ | |
| $9\sqrt{x}$ | $\frac{1}{2}\sqrt{2}\frac{5x+1}{\sqrt{x}}$ |
| $7\sqrt{(a-2b)}$ | |