1 Leyes de los exponentes

Reduzca la expresión

$$\frac{u^{3a}t^{-b}}{u^{9a}t^{4b}} \tag{1}$$

$$\left(u^{-3}v^{2}\right)^{-3t} \tag{2}$$

$$(3x^{5}y^{4})(4xy^{3}) \tag{3}$$

$$\frac{6x^{3}y^{-5}z^{-1}}{3x^{-1}y^{3}z} \tag{4}$$

$$\left(\frac{2r^{4a}}{s^{a}}\right)^{3y}\left(\frac{3s^{y}}{r^{6y}}\right)^{2a} \tag{5}$$

$$\frac{a^{b^{2}}b^{a}}{a^{b^{2}}b^{-a}}+\frac{a^{2b^{2}}b^{-2a}}{a^{-2b^{2}}b^{2a}} \tag{6}$$

$$\frac{\sqrt[3]{x^{3}}}{y}+xy^{-1} \tag{7}$$

$$\sqrt{4ka^{k}}\sqrt{4\frac{a^{n-k}}{k}} \tag{8}$$

$$\left(\frac{c^{-4}}{16d^{8}}\right)^{\frac{3}{4}}+\left(-\frac{y^{\frac{3}{2}}}{y^{-\frac{1}{3}}}\right)^{3} \tag{9}$$

$$\frac{\left(6x^{3}\right)^{2}}{\left(2x^{2}\right)^{3}}\cdot\left(3x^{2}\right)^{0} \tag{10}$$

$$\left(8x^{4}y^{-3}\right)\left(\frac{1}{2}x^{-5}y^{2}\right) \tag{11}$$

$$\left(\frac{4a^{2}b}{a^{3}b^{2}}\right)\left(\frac{5a^{2}b}{2b^{4}}\right) \tag{12}$$

$$\left(x^{2}yz^{3}\right)^{2}\left(-2x^{-3}z^{-6}\right)^{-\frac{1}{3}}\left(x^{3}y^{-2}\right) \tag{13}$$

$$\left(2w^{5}v^{-10}\right)^{\frac{1}{5}}\left(6w^{-3}v\right)\left(\frac{1}{3}w^{-1}v^{3}\right) \tag{14}$$

$$\sqrt{3t^{4}v^{2}}\sqrt{9t^{-1}v^{4}} \tag{15}$$

$$\left(\frac{3x^{5}y^{4}z}{x^{0}y^{-3}z^{2}}\right)^{2} \tag{16}$$

$$\sqrt{\frac{5x^{8}y^{3}}{10y^{6}}}+\sqrt{\left(3x^{8}y^{-3}\right)^{2}} \tag{17}$$

$$\left(\frac{x^{6}}{9y^{-4}}\right)^{-\frac{1}{2}}+\left(8x^{-\frac{2}{3}}\right)x^{\frac{1}{3}} \tag{18}$$

$$(8r)^{\frac{1}{3}}\left(2r^{\frac{1}{2}}\right) \tag{19}$$

$$\frac{\left(x^{6w}y^{3w}\right)^{-\frac{1}{3}k}}{\left(x^{4k}y^{2k}\right)^{-\frac{1}{2}w}} \tag{20}$$