

1. Скоротити дріб:

$\frac{a-1}{\sqrt{a}-1}$		$\frac{x+\sqrt{3}}{x^2-3}$	
$\frac{b-2}{b^2+2\sqrt{2b}+2}$		$\frac{\sqrt{m}-\sqrt{n}}{m-n}$	
$\frac{\sqrt{x}-\sqrt{y}}{\sqrt{x}-2\sqrt[4]{xy}+\sqrt{y}}$		$\frac{\sqrt[3]{b}-1}{\sqrt[6]{b}+1}$	
$\frac{\sqrt{a}+\sqrt{b}}{\sqrt{ab^2}+\sqrt{a^2b}}$		$\frac{a-b}{\sqrt[4]{a^3}+\sqrt[4]{ab^2}}$	
$\frac{\sqrt[3]{4}+\sqrt[3]{a^2}}{2\sqrt[3]{2}-a\sqrt[3]{a}}$		$\frac{\sqrt[3]{x^2}+\sqrt[3]{xy}+\sqrt[3]{y^2}}{x-y}$	
$\frac{\sqrt{x^3y}-2xy+\sqrt{xy^3}}{\sqrt[4]{x^3y^2}-\sqrt[4]{x^2y^3}}$		$\frac{\sqrt[3]{a^2}-16}{a+64}$	

Відповіді

$$\frac{1}{\sqrt[3]{4}-\sqrt[3]{a^2}}$$

$$\frac{\sqrt[3]{a}-4}{\sqrt[3]{a^2}-4\sqrt[3]{a}+16}$$

$$\frac{1}{\sqrt{m}+\sqrt{n}}$$

$$\frac{\sqrt{b}-\sqrt{2}}{\sqrt{b}+2}$$

$$\frac{1}{\sqrt{ab}}$$

$$(\sqrt{x}-\sqrt{y})\cdot(\sqrt[4]{x}+\sqrt[4]{y})$$

$$\frac{\sqrt[4]{x}+\sqrt[4]{y}}{\sqrt[4]{x}-\sqrt[4]{y}}$$

$$\frac{1}{x-\sqrt{3}}$$

$$\frac{\sqrt{a}-\sqrt{b}}{\sqrt[4]{a}}$$

$$\frac{1}{\sqrt[3]{x}-\sqrt[3]{y}}$$

$$\sqrt[6]{b}-1$$

$$\sqrt{a}+1$$

2. Спростіть вирази:

$\sqrt{m} + \sqrt{n} - (\sqrt[4]{m} - \sqrt[4]{n})^2$	
$\frac{a-b}{\sqrt{a}-\sqrt{b}} - \frac{\sqrt{a^3}-\sqrt{b^3}}{a-b}$	
$\left(\frac{1}{\sqrt{a}-3\sqrt{b}} + \frac{1}{3\sqrt{b}+\sqrt{a}}\right) \cdot (9b-a)$	
$\frac{81x-y}{(3\sqrt[4]{x}+\sqrt[4]{y}) \cdot (3\sqrt[4]{x}-\sqrt[4]{y})} - \sqrt{y}$	
$\left(\frac{1}{\sqrt[4]{a}-\sqrt[4]{b}} - \frac{1}{\sqrt[4]{a}+\sqrt[4]{b}}\right)^2 : \frac{\sqrt{a}+\sqrt{b}}{a-b}$	
$\frac{8-m}{\sqrt[3]{m}+2} : \left(2 + \frac{\sqrt[3]{m^2}}{\sqrt[3]{m}+2}\right) + \left(\sqrt[3]{m} + \frac{2\sqrt[3]{m}}{\sqrt[3]{m}-2}\right) \cdot \frac{\sqrt[3]{m^2}-4}{\sqrt[3]{m^2}+2\sqrt[3]{m}}$	
$\left(\frac{\sqrt[4]{ab^3}-\sqrt[4]{a^3b}}{\sqrt{a}-\sqrt{b}} + \frac{1+\sqrt{ab}}{\sqrt[4]{ab}}\right)^{-2} \cdot \sqrt{1+\frac{a}{b}+2\sqrt{\frac{a}{b}}}$	
$\left(\frac{\sqrt[3]{x^2y^2}+x\sqrt[3]{y}}{x^3\sqrt[3]{y}+y^3\sqrt[3]{x}}-1\right) \cdot \left(\sqrt[3]{\left(\frac{x}{y}\right)^2} + \sqrt[3]{\frac{x}{y}}+1\right) \cdot \left(\frac{y-x}{y}\right)^{-1}$	

Відповіді

$$-\frac{\sqrt[3]{y^2}}{\sqrt[3]{x^2}+\sqrt[3]{y^2}}$$

$$2$$

$$9\sqrt{x}$$

$$\frac{\sqrt{ab}}{\sqrt{a}+\sqrt{b}}$$

$$\sqrt{a}(\sqrt{a}+\sqrt{b})$$

$$\frac{4\sqrt{b}}{\sqrt{a}-\sqrt{b}}$$

$$-2\sqrt{a}$$

$$2\sqrt[4]{mn}$$