

$$1 \quad \sqrt[3]{\frac{x^2 - xy}{xy + y^2}} \cdot \sqrt{\frac{x+y}{x-y}} \cdot \sqrt[6]{\frac{x^3 + 2x^2y + xy^2}{x^2y - 2xy^2 + y^3}} \cdot \sqrt{\frac{y}{x}}$$

$$2 \quad \left(\sqrt{\frac{x}{y}} \sqrt[3]{\left(\frac{x+y}{x-y}\right)^2} : \sqrt[3]{\frac{x-y}{x+y}} \sqrt{\frac{x}{y}} \right) \cdot \sqrt{\frac{x-y}{x+y}} \sqrt[3]{\frac{y(x-y)}{x(x+y)}}$$

$$3 \quad \frac{\sqrt[6]{\frac{x-y}{y}} \sqrt{\frac{x}{x-y}}}{\sqrt[6]{\frac{x+y}{x}} \sqrt{\frac{y}{x+y}}} \cdot \sqrt{\frac{x+y}{x-y}} \sqrt[3]{\frac{x-y}{x+y}} : \sqrt[4]{\frac{x(x+y)}{y(x-y)}} : \sqrt{\frac{x+y}{x-y}}$$

$$4 \quad \sqrt{\frac{x-y}{y} - \frac{x-y}{x+y}} \cdot \sqrt[5]{\frac{x^2 + 2xy + y^2}{x^2 - 2xy + y^2}} : \sqrt[10]{1 - \frac{2y}{x+y}} \cdot \sqrt{\frac{y}{x}}$$

$$5 \quad \left(\sqrt[3]{x^2 - y^2} : \sqrt{\frac{x^2 + y^2}{xy} - 2} \right)^2 : \left[xy \left(\sqrt[3]{\frac{x+y}{(x-y)^2}} \right)^2 \right]$$

$$6 \quad \sqrt[3]{\frac{(x+y)^2}{x-y}} \sqrt[4]{\frac{(x-y)^3}{x+y}} : \sqrt[3]{\frac{x+y}{(x-y)^2}} \sqrt[4]{\frac{x-y}{(x+y)^3}}$$

$$7 \quad \sqrt{\frac{x}{y} + 1} \cdot \sqrt{y + \frac{y^2}{x}} : \left(\sqrt{\frac{1}{y} + \frac{1}{x}} \cdot \sqrt[4]{xy^2 + y^3} \right)$$

$$8 \quad \sqrt[6]{\frac{x^2(x-y)^4}{x+y}} \cdot \sqrt[3]{\frac{1}{x^2y - y^3}} \cdot \sqrt[6]{\frac{(x+y)^3}{(x-y)^2}}$$