

RATIONAL EXPONENTS vs RADICALS

Work with a partner to find the relationship between radicals and rational exponents:

$$\sqrt{25}$$

$$25^{\frac{1}{2}}$$

$$\sqrt[3]{25}$$

$$25^{\frac{1}{3}}$$

$$\sqrt[5]{25}$$

$$25^{\frac{1}{5}}$$

$$\sqrt{500}$$

$$500^{\frac{1}{2}}$$

$$\sqrt[3]{500}$$

$$500^{\frac{1}{3}}$$

$$\sqrt[4]{500}$$

$$500^{\frac{1}{4}}$$

$$\sqrt[5]{100}$$

$$100^{\frac{1}{5}}$$

$$\sqrt{100}$$

$$100^{\frac{1}{2}}$$

RATIONAL EXPONENTS vs RADICALS

Work with a partner to find the relationship between radicals and rational exponents:

$$\left(\sqrt{25}\right)^3$$

$$25^{\frac{2}{3}}$$

$$\sqrt[3]{25^2}$$

$$500^{\frac{3}{4}}$$

$$\left(\sqrt[5]{25}\right)^4$$

$$25^{\frac{3}{2}}$$

$$\left(\sqrt{500}\right)^3$$

$$100^{\frac{9}{5}}$$

$$\sqrt[3]{500^4}$$

$$500^{\frac{4}{3}}$$

$$\sqrt[4]{500^3}$$

$$25^{\frac{4}{5}}$$

$$\left(\sqrt[5]{100}\right)^9$$

$$100^{\frac{3}{2}}$$

$$\left(\sqrt{100}\right)^3$$

$$500^{\frac{3}{2}}$$