Exponents – Radicals

The exponent is the numerator, the index is the denominator.

Rewrite the following as radicals or as exponentials with rational exponents. *The denominator is the index!*

1.
$$4^{1/2}$$

2.
$$8^{2/3}$$

3.
$$X^{2/5}$$

4.
$$(3Y)^{1/3}$$

5.
$$\sqrt[2]{16^1}$$

6.
$$\sqrt[3]{8^2}$$

7.
$$\sqrt[5]{X^2}$$

8.
$$\sqrt[4]{X^2}$$

9.
$$\sqrt[4]{X^2Y^8}$$

10.
$$\sqrt[3]{27X^2Y^9Z^3}$$