

ALGEBRA: Cubes and roots of Expressions

 **8094** Watch video and complete examples

Lesson Notes and Examples:

Example 1

$$\sqrt{a^8}$$

Example 2

$$\sqrt{9a^2}$$

Example 3

$$\sqrt[3]{27a^{12}b^9}$$

Example 4

$$\sqrt{\frac{16x^{16}}{9x^{10}}}$$

Simplify:

1) $\sqrt{a^8b^{10}}$

2) $\sqrt{16x^4y^{12}}$

3) $\sqrt[3]{8a^{18}b^{12}c^3}$

4) $2\sqrt{4a^{10}}$

5) $\sqrt[3]{x^3y^6}$

6) $\sqrt{25a^{10}b^4}$

7) $\sqrt[3]{27x^{12}y^{21}}$

8) $2a\sqrt{81a^6}$



Mark work and do corrections. [1-4]



Mark work and do corrections. [5-8]

9) $\sqrt{4x^8y^{16}}$

10) $\sqrt{16b^2 + 9b^2}$

11) $\sqrt{16a^2 \times 9a^2}$

12) $\sqrt{\frac{x^2}{4y^6}}$



Mark work and do corrections. [9-12]

13) $\sqrt{25p^6q^{10}}$

14) $\sqrt{\frac{4a^6}{9b^4}}$

15) $\sqrt[3]{125q^3r^{21}}$

16) $2a\sqrt{9a^6} \times 4b\sqrt{4b^2}$



Mark work and do corrections. [13-16]