

Simplify the expression, in simplest radical form.

1.) $\sqrt[3]{-16}$

2.) $\sqrt[3]{81}$

3.) $\sqrt[5]{32x^{10}}$

4.) $\sqrt[4]{y^9}$

5.) $\sqrt{-36x^3}$

6.) $\sqrt[3]{8x^3y^5}$

7.) $\sqrt[3]{32x^6y^4}$

8.) $\sqrt[4]{32xy^4}$

9.) Write an equivalent expression: $\sqrt[3]{64x^4y^3}$

- (a) $2x$ (b) $2x^{\frac{4}{3}}y$ (c) $4x^{\frac{4}{3}}y$ (d) $4x^{12}y^9$

10.) The expression $\sqrt[4]{16x^2y^7}$ is equivalent to

- (a) $2x^{\frac{1}{2}}y^{\frac{7}{4}}$ (b) $2x^8y^{28}$ (c) $4x^{\frac{1}{2}}y^{\frac{7}{4}}$ (d) $4x^8y^{28}$

11.) The expression $\sqrt[3]{27x^3y^2}$ is equivalent to

- (a) $3x^3y^{\frac{2}{3}}$ (b) $3xy^{\frac{2}{3}}$ (c) $3xy^{\frac{3}{2}}$ (d) $27xy^{\frac{3}{2}}$