

N.RN.A.2: Simplifying Radicals 2

1 The expression $\sqrt[3]{64a^{16}}$ is equivalent to

- 1) $8a^4$
- 2) $8a^8$
- 3) $4a^5 \sqrt[3]{a}$
- 4) $4a \sqrt[3]{a^5}$

2 Simplify: $\sqrt[3]{a^4 b^3}$

3 Simplify: $\sqrt[3]{16a^4 b^3}$

4 Simplify: $\sqrt[3]{56x^4 y}$

5 Simplify: $\sqrt[3]{54a^7 b^4}$

6 Simplify: $\sqrt[3]{81ab^4}$

7 Simplify: $2 \sqrt[3]{16a^3 b^4 c^5}$

8 Express in simplest form: $\sqrt[3]{\frac{a^6 b^9}{-64}}$

9 Simplify: $\sqrt[5]{-243a^6 b^{12}}$

10 Simplify: $\sqrt[6]{8a^3 b^6}$

11 Simplify: $\sqrt{\sqrt[3]{a^2}}$

N.RN.A.2: Simplifying Radicals 2

Answer Section

1 ANS: 3
 $\sqrt[3]{4^3 a^{15} a} = 4a^5 \sqrt[3]{a}$

REF: 061204a2

2 ANS:
 $ab \sqrt[3]{a}$

REF: 019615a1

3 ANS:
 $2ab^3 \sqrt{2a}$

REF: 089413a1

4 ANS:
 $2x \sqrt[3]{7xy}$

REF: 119313a1

5 ANS:
 $3a^2 b^3 \sqrt{2ab}$

REF: 019811a1

6 ANS:
 $3b^3 \sqrt{3ab}$

REF: 019713a1

7 ANS:
 $4abc \sqrt[3]{2bc^2}$

REF: 039807a1

8 ANS:
 $\frac{a^2 b^3}{4}$

REF: 011231a2

9 ANS:
 $-3ab^2 \sqrt[5]{ab^2}$

REF: 069108a1

10 ANS:
 $b^6 \sqrt{8a^3}$

REF: 069812a1

11 ANS:
 $\sqrt[3]{a}$

REF: 089603al