

8.2

$$1) \frac{\sqrt[3]{625}}{\sqrt[3]{5^4}} \\ 5^3\sqrt[3]{5}$$

$$3) \frac{\sqrt[3]{750}}{\sqrt[3]{2 \cdot 3 \cdot 5^3}} \\ 5^3\sqrt[3]{2 \cdot 3} \\ 5^3\sqrt[3]{6}$$

$$5) \frac{\sqrt[3]{875}}{\sqrt[3]{5^3 \cdot 7}} \\ 5^3\sqrt[3]{7}$$

$$7) \frac{-4^4\sqrt[4]{96}}{-4^4\sqrt[4]{2^5 \cdot 3}} \\ -4 \cdot 2^4\sqrt[4]{2 \cdot 3} \\ -8^4\sqrt[4]{6}$$

$$9) \frac{6^4\sqrt[4]{112}}{6^4\sqrt[4]{2^4 \cdot 7}} \\ 6 \cdot 2^4\sqrt[4]{7} \\ 12^4\sqrt[4]{7}$$

$$11) \frac{-^4\sqrt[4]{112}}{-^4\sqrt[4]{2^4 \cdot 7}} \\ -2^4\sqrt[4]{7}$$

$$13) \frac{\sqrt[4]{648a^2}}{\sqrt[4]{2^3 \cdot 3^4 a^2}} \\ 3^4\sqrt[4]{2^3 a^2} \\ 3^4\sqrt[4]{8a^2}$$

$$15) \frac{\sqrt[5]{224n^3}}{\sqrt[5]{2^5 \cdot 7n^3}} \\ 2^5\sqrt[5]{7n^3}$$

$$17) \frac{\sqrt[5]{224p^5}}{\sqrt[5]{2^5 \cdot 7p^5}} \\ 2p^5\sqrt[5]{7}$$

$$19) \frac{-3^7\sqrt[7]{896r}}{-3^7\sqrt[7]{2^7 \cdot 7r}} \\ -3 \cdot 2^7\sqrt[7]{7r} \\ -6^7\sqrt[7]{7r}$$

$$21) \frac{-2^3\sqrt[3]{-48v^7}}{-2^3\sqrt[3]{-1^3 \cdot 2^4 \cdot 3v^7}} \\ -2 \cdot -1 \cdot 2v^2\sqrt[3]{2 \cdot 3v} \\ 4v^2\sqrt[3]{6v}$$

$$23) \frac{-7^3\sqrt[3]{320n^6}}{-7^3\sqrt[3]{2^6 \cdot 5n^6}} \\ -7 \cdot 2^2n^2\sqrt[3]{5} \\ -7 \cdot 4n^2\sqrt[3]{5} \\ -28n^2\sqrt[3]{5}$$

$$25) \frac{\sqrt[3]{-135x^5y^3}}{\sqrt[3]{-1^3 \cdot 3^3 \cdot 5x^5y^3}} \\ -1 \cdot 3xy^3\sqrt[3]{5x^2} \\ -3xy^3\sqrt[3]{5x^2}$$

$$27) \frac{\sqrt[3]{-32x^4y^4}}{\sqrt[3]{-1^3 \cdot 2^5x^4y^4}} \\ -1 \cdot 2xy^3\sqrt[3]{2^2xy} \\ -2xy^3\sqrt[3]{4xy}$$

$$29) \frac{\sqrt[3]{256x^4y^6}}{\sqrt[3]{2^8x^4y^6}} \\ 2^2xy^2\sqrt[3]{2^2x} \\ 4xy^2\sqrt[3]{4x}$$

$$31) \frac{7^3\sqrt[3]{-81x^3y^7}}{7^3\sqrt[3]{-1^3 \cdot 3^4x^3y^7}} \\ 7 \cdot -1 \cdot 3xy^2\sqrt[3]{3y} \\ -21xy^2\sqrt[3]{3y}$$

$$33) \frac{2^3\sqrt[3]{375u^2v^8}}{2^3\sqrt[3]{3 \cdot 5^3u^2v^8}} \\ 2 \cdot 5v^2\sqrt[3]{3u^2v^2} \\ 10v^2\sqrt[3]{3u^2v^2}$$

$$35) \frac{-3^3\sqrt[3]{192ab^2}}{-3^3\sqrt[3]{2^6 \cdot 3ab^2}} \\ -3 \cdot 2^2\sqrt[3]{3ab^2} \\ -3 \cdot 4\sqrt[3]{3ab^2} \\ -12\sqrt[3]{3ab^2}$$

$$37) \frac{6^3\sqrt[3]{-54m^8n^3p^7}}{6^3\sqrt[3]{-1^3 \cdot 2 \cdot 3^3m^8n^3p^7}} \\ 6 \cdot -1 \cdot 3m^2np^2\sqrt[3]{2m^2p} \\ -18m^2np^2\sqrt[3]{2m^2p}$$

$$39) \frac{6^4\sqrt[4]{648x^5y^7z^2}}{6^4\sqrt[4]{2^3 \cdot 3^4x^5y^7z^2}} \\ 6 \cdot 3xy^4\sqrt[4]{2^3xy^3z^2} \\ 18xy^4\sqrt[4]{8xy^3z^2}$$

$$41) \frac{7^4\sqrt[4]{128h^6j^8k^8}}{7^4\sqrt[4]{2^7h^6j^8k^8}} \\ 7 \cdot 2hj^2k^2\sqrt[4]{2^3h^2} \\ 14hj^2k^2\sqrt[4]{8h^2}$$