

8.1

$$1) \frac{\sqrt{245}}{\sqrt{5 \cdot 7^2}} \\ 7\sqrt{5}$$

$$3) \frac{\sqrt{36}}{\sqrt{2^2 \cdot 3^2}} \\ \frac{2 \cdot 3}{6}$$

$$5) \frac{\sqrt{12}}{\sqrt{2^2 \cdot 3}} \\ 2\sqrt{3}$$

$$7) \frac{3\sqrt{12}}{3\sqrt{2^2 \cdot 3}} \\ \frac{3 \cdot 2\sqrt{3}}{6\sqrt{3}}$$

$$9) \frac{6\sqrt{128}}{6\sqrt{2^7}} \\ \frac{6 \cdot 2^3 \sqrt{2}}{6 \cdot 8\sqrt{2}} \\ 48\sqrt{2}$$

$$11) \frac{-8\sqrt{392}}{-8\sqrt{7^2 \cdot 2^3}} \\ \frac{-8 \cdot 7 \cdot 2\sqrt{2}}{-112\sqrt{2}}$$

$$13) \frac{\sqrt{192n}}{\sqrt{2^6 \cdot 3n}} \\ \frac{2^3 \sqrt{3n}}{8\sqrt{3n}}$$

$$15) \frac{\sqrt{196v^2}}{\sqrt{2^2 \cdot 7^2 \cdot v^2}} \\ \frac{2 \cdot 7 \cdot v}{14v}$$

$$17) \frac{\sqrt{252x^2}}{\sqrt{2^2 \cdot 3^2 \cdot 7x^2}} \\ \frac{2 \cdot 3x\sqrt{7}}{6x\sqrt{7}}$$

$$19) \frac{-\sqrt{100k^4}}{-\sqrt{2^2 \cdot 5^2 k^4}} \\ \frac{-2 \cdot 5 \cdot k^2}{-10k^2}$$

$$21) \frac{-7\sqrt{64x^4}}{-7\sqrt{2^6 x^4}} \\ \frac{-7 \cdot 2^3 x^2}{-7 \cdot 8x^2} \\ -56x^2$$

$$23) \frac{-5\sqrt{36m}}{-5\sqrt{2^2 \cdot 3^2 m}} \\ \frac{-5 \cdot 2 \cdot 3\sqrt{m}}{-30\sqrt{m}}$$

$$25) \frac{\sqrt{45x^2y^2}}{\sqrt{3^2 \cdot 5 \cdot x^2y^2}} \\ \frac{3xy\sqrt{5}}{3xy\sqrt{5}}$$

$$27) \frac{\sqrt{16x^3y^3}}{\sqrt{2^4 x^3y^3}} \\ \frac{2^2 xy\sqrt{xy}}{4xy\sqrt{xy}}$$

$$29) \frac{\sqrt{320x^4y^4}}{\sqrt{2^6 \cdot 5x^4y^4}} \\ \frac{2^3 x^2 y^2 \sqrt{5}}{8x^2 y^2 \sqrt{5}}$$

$$31) \frac{6\sqrt{80xy^2}}{6\sqrt{2^4 \cdot 5xy^2}} \\ \frac{6 \cdot 2^2 y\sqrt{5x}}{6 \cdot 4y\sqrt{5x}} \\ 24y\sqrt{5x}$$

$$33) \frac{5\sqrt{245x^2y^3}}{5\sqrt{5 \cdot 7^2 x^2 y^3}} \\ \frac{5 \cdot 7xy\sqrt{5y}}{35xy\sqrt{5y}}$$

$$35) \frac{-2\sqrt{180u^3v}}{-2\sqrt{2^2 \cdot 3^2 \cdot 5u^3v}} \\ \frac{-2 \cdot 2 \cdot 3u\sqrt{5uv}}{-12u\sqrt{5uv}}$$

$$37) \frac{-8\sqrt{180x^4y^2z^4}}{-8\sqrt{2^2 \cdot 3^2 \cdot 5x^4y^2z^4}} \\ \frac{-8 \cdot 2 \cdot 3x^2yz^2\sqrt{5}}{-48x^2yz^2\sqrt{5}}$$

$$39) \frac{2\sqrt{80hj^4k}}{2\sqrt{2^4 \cdot 5hj^4k}} \\ \frac{2 \cdot 2^2 j^2 \sqrt{5hk}}{2 \cdot 4j^2 \sqrt{5hk}} \\ 8j^2 \sqrt{5hk}$$

$$41) \frac{-4\sqrt{54mnp^2}}{-4\sqrt{2 \cdot 3^2 mnp^2}} \\ \frac{-4 \cdot 3p\sqrt{2 \cdot 3mn}}{-12p\sqrt{60n}}$$