P. e Rad.: Con. Serie 3

1) $\sqrt[6]{2} \cdot \sqrt[6]{2^8} = \sqrt[6]{2^9} \overset{1.}{=} \sqrt[2]{2^3} \overset{2.}{=} 2\sqrt{2}$

↳ $\overset{2.}{=} 2\sqrt[6]{2^3} \overset{1.}{=} 2\sqrt{2}$

↳ $= \sqrt[6]{2} \cdot 2\sqrt[6]{2^2} = 2\sqrt[6]{2^3} = 2\sqrt{2}$

2) $\sqrt{2^3 \cdot 3^2} = 2 \cdot 3 \cdot \sqrt{2}$

3) $\frac{\sqrt{2^3 \cdot 5}}{\sqrt[4]{5^2}} = \frac{\sqrt{2^3 \cdot 5}}{\sqrt{5}} = \sqrt{\frac{2^3 \cdot \cancel{5}}{\cancel{5}}} = \sqrt{2^3} = 2\sqrt{2}$

↳ $\frac{2\sqrt{2 \cdot 5}}{\sqrt{5}} = 2\sqrt{\frac{2 \cdot \cancel{5}}{\cancel{5}}} = 2\sqrt{2}$

4) $\frac{\sqrt[3]{2^2 x^8}}{\sqrt[3]{x^5}} = \sqrt[3]{\frac{2^2 x^{\cancel{8}^3}}{\cancel{x^5}}} = \sqrt[3]{2^2 x^3} = x\sqrt[3]{2^2}$

↳ $= \frac{x^{\cancel{1}} \sqrt[3]{2^2 x^2}}{\cancel{x} \sqrt[3]{x^2}} = x\sqrt[3]{\frac{2^2 \cancel{x^2}}{\cancel{x^2}}} = x\sqrt[3]{2^2}$

5) $\sqrt{3^2 \cdot 7^2 \cdot 13} = 3 \cdot 7 \cdot \sqrt{13}$

$\sqrt{2 \cdot 5^2 \cdot 3^2} = 5 \cdot 3 \cdot \sqrt{2}$

! $\sqrt{16+432} = \sqrt{448} = \sqrt{2^6 \cdot 7} = 2^3\sqrt{7}$

$\sqrt{2^4 \cdot 3^2 \cdot 5} = 2^2 \cdot 3\sqrt{5}$