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36 $$\frac{(x^{n-2})^{n-4}}{x^6(x^n)^{n-6}} + \frac{(x^{n-1})^{n+1}(x^n)^{2n}}{(x^{3n})^n : (x)^3} - 4\frac{x^n x^4}{x^{n-2}} =$$

$$\left[\text{RIS. } 2x^2 - 4x^6\right]$$

$$= \frac{x^{(n-2)(n-4)}}{x^6 \cdot x^{n(n-6)}} + \frac{x^{(n-1)(n+1)} \cdot x^{2n^2}}{x^{3n^2} : x^3} - 4\frac{x^{n+4}}{x^{n-2}} =$$

$$= \frac{x^{n^2-4n-2n+8}}{x^6 \cdot x^{n^2-6n}} + \frac{x^{n^2+n-n-1} \cdot x^{2n^2}}{x^{3n^2-3}} - 4x^{n+4-(n-2)} =$$

$$= \frac{x^{n^2-6n+8}}{x^{6+n^2-6n}} + \frac{x^{n^2-1+2n^2}}{x^{3n^2-3}} - 4x^{n+4-n+2} =$$

$$= x^{n^2-6n+8-(6+n^2-6n)} + x^{n^2-1+2n^2-(3n^2-3)} - 4x^6 =$$

$$= x^{n^2-6n+8-6-n^2+6n} + x^{n^2-1+2n^2-3n^2+3} - 4x^6 =$$

$$= x^2 + x^2 - 4x^6 = \boxed{2x^2 - 4x^6}$$

35 $[(-a^{2n})^2(a^{n-2})^{n-2}]:(a^{n+1})^{n-1}+a^2[2(a^n)^n:(a^n)^{n-3}]:(a^{n-1})^3=$

$$\left[\text{RIS. } 3a^5\right]$$

$$=\left[a^{4n}\cdot a^{(n-2)\cdot(n-2)}\right]:a^{(n+1)(n-1)}+a^2\left[2a^{n^2}:a^{n(n-3)}\right]:a^{3(n-1)}=$$

$$=\left[a^{4n}\cdot a^{n^2-2n-2n+4}\right]:a^{n^2-\cancel{n}+\cancel{n}-1}+a^2\left[2a^{n^2}:a^{n^2-3n}\right]:a^{3n-3}=$$

$$=\left[a^{4n}\cdot a^{n^2-4n+4}\right]:a^{n^2-1}+a^2\left[2a^{n^2-(n^2-3n)}\right]:a^{3n-3}=$$

$$=\left[a^{\cancel{4n}+n^2-\cancel{4n}+4}\right]:a^{n^2-1}+a^2\left[2a^{\cancel{n^2}-\cancel{n^2}+3n}\right]:a^{3n-3}=$$

$$=a^{n^2+4}:a^{n^2-1}+a^2\left[2a^{3n}\right]:a^{3n-3}=$$

$$=a^{\cancel{n^2}+4-\cancel{n^2}+1}+2a^{2+3n}:a^{3n-3}=$$

$$=a^5+2a^{2+\cancel{3n}-\cancel{3n}+3}=a^5+2a^5=\boxed{3a^5}$$