

$$p^{2n-1} - p^{2n+1}$$

Faktorisieren

Lösung:

$$\begin{aligned} p^{2n-1} - p^{2n+1} &= p^{2n} \cdot \frac{1}{p} - p^{2n} \cdot p = p^{2n} \left(\frac{1}{p} - p \right) = p^{2n} \left(\frac{1-p^2}{p} \right) = p^{2n} \cdot \frac{1}{p} \cdot (1-p^2) \\ &= p^{2n-1}(1-p^2) \end{aligned}$$