

Hint for Problem 208

Note that

$$\frac{1 - q^2}{1 - q} \cdot \frac{1 - q^4}{1 - q^2} \cdot \frac{1 - q^6}{1 - q^3} \cdot \frac{1 - q^8}{1 - q^4} = \frac{(1 - q^6)(1 - q^8)}{(1 - q)(1 - q^3)}.$$