To multiply a polynomial by a monomial, be sure to distribute the monomial to each term in the polynomial.

$$8x^2\left(7x^4 - 6x^2 - 4\right) = 8x^2\left(7x^4\right) + 8x^2\left(-6x^2\right) +$$
$$8x^2(-4) = 56x^6 - 48x^4 - 32x^2$$