

Correct. The domain of this expression must exclude  $a = 0$ , since this value would make the numerator of the divisor equal to 0:  $\frac{6(0)^3}{2} = \frac{0}{2} = 0$ , and would lead to division by 0:  $\frac{12(0)^5}{6} \div 0$ . Simplifying the expression, you find

$$\frac{12a^5}{6} \cdot \frac{2}{6a^3} = \frac{2a^2}{3}.$$