Two curves intersect orthogonally when their tangent lines at each point of intersection are perpendicular. Suppose C is a positive number. The curves $y = Cx^2$ and $y = \frac{1}{x^2}$ intersect twice. Find C so that the curves intersect orthogonally. For that value of C, sketch both curves when $-2 \leq x \leq 2$ and $0 \leq y \leq 4$.