Quiz 18

Name: _____

 $1.\ {\rm Find}$ the general solution to the following differential equation.

$$\frac{dy}{dx} = \frac{x^2}{y}$$

$$y dy = x^2 dx$$

$$\frac{1}{2}y^2 = \frac{x^3}{3} + C$$

$$y = \pm \sqrt{\frac{2x^3}{3} + C}.$$