Mathematical Models Forecast Future Prices:

MATHEMATICAL MODEL	Equation	Coefficient of Determination (R^2)	Three-Month Price Forecast	Forecast As Of June 30, 2013
Linear Model	$\hat{Y} = -.44\ (X) + 52.76$	**0.27**	**$40.88**	**$38.68**
Exponential Model	$\hat{Y} = 52.27\left(e^{-.01(X)}\right)$	**0.23**	**$39.90**	**$37.96**
Logarithmic Model	$\hat{Y} = -4.42\ ln(X) + 57.37$	**0.37**	**$42.80**	**$42.05**
Quadratic Model	$\hat{Y} = .08\ X^2 - 2.32(X) + 60.90$	**0.56**	**$56.58**	**$68.58**
Degree 3 Polynomial Model	$\hat{Y} = .002\ X^3 + .01\ X^2 - 1.63(X) + 59.33$	**0.57**	**$61.98**	**$82.95**
Power	$\hat{Y} = 57.49\ X^{-.09}$	**0.33**	**$42.73**	**$42.09**

Based on the coefficient of determinations (R^2), the mathematical model that best fits the data is _____ (name model).

This model predicts that the price of _____(name of stock) will be $ _____ in three months; and will be $_____ on June 30, 2013.