2. (9 points) Consider the following equations with \( a \) and \( b \) constants:

(i) \( y^5 = e^x \) 
(ii) \( y - a^b = b(x - a)^{1/3}(x - a)^{2/3} \)

(iii) \( y - 2 = \sqrt{x^2} \) 
(iv) \( \pi y = (9/13)^x \)

Use the equations to answer the following. (One equation will not be used.)

(a) Which of the above can be written so that \( y \) is a linear function of \( x \)?

Equation number __________________

What is the slope of the function? ______________

What is the y-intercept of the graph? ______________

(b) Which of the above can be written so that \( y \) is an exponential function of \( x \)?

Equation number __________________

What is the initial value of the function? ______________

What is the percent rate of growth/decay of the function? ______________

(c) Which of the above equations can be written as a power function of the form \( y = kx^p \)?

Equation number __________________

What is \( k \)? ______________

What is \( p \)? ______________