

LOG REVIEW

No Calculator
Pink Sheet Allowed
 # 1-3.

2/ solve for x

Make common base

$$\left(\frac{1}{25}\right)^{x-3} = \sqrt[3]{5^x}$$

$$(5^{-2})^{x-3} = 5^{x/3}$$

$$5^{-2x+6} = 5^{x/3}$$

$$3[-2x+6 = \frac{x}{3}]$$

$$-6x+18 = x$$

$$\left(\frac{18}{7}\right) = \frac{x}{3}$$

Evaluate.

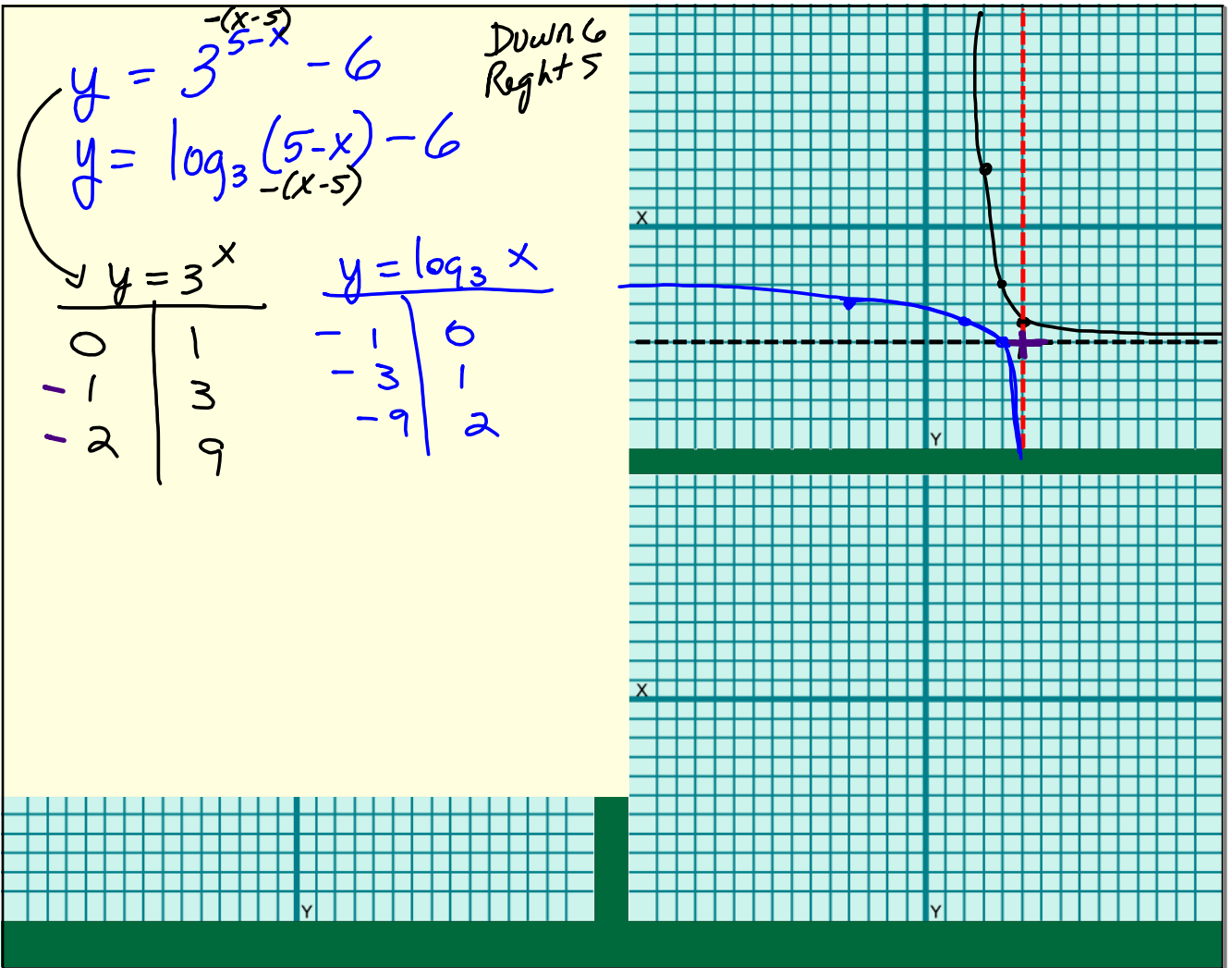
$$\log_7 49 = \log_7 7^2 = 2$$

$$\log_2 \frac{1}{\sqrt[6]{64}} = \log_2 \frac{1}{2^6}$$

$$= \log_2 2^{-6/5} = \log_2 2^{-6/5}$$

$$= -6/5$$

$$\ln e^{813} = 813$$



Solving Equations - Get rid of logs - Exponentiate!

$$\log_x 7 = \frac{1}{2}$$

$$(7)^2 = (x^{1/2})^2$$

$$49 = x$$

$$5(e) \quad \frac{1}{2} (2 \log 4 - 3 \log 2) = \log x$$

$$2 \log 4 - 3 \log 2 = 2 \log x$$

$$\log 4^2 - \log 2^3 = \log x^2$$

$$\log 16 - \log 8 = \log x^2$$

$$\log \frac{16}{8} = \log x^2$$

$$\log 2 = \log x^2$$

$$\sqrt{2} = \sqrt{x^2}$$

$$\sqrt{2} = x$$

Regression - Which is best fit?

- 1) Points evenly balance on either side of the curve
- 2) Highest r^2
- 3) How well does it predict the future?

