

**Classwork 7.1 Exponential and Logarithm**  
**PCHA 2022-23 / Dr. Kessner**

No calculator. Have fun!

**1.** Evaluate the following:

$$2^{-2}$$

$$2^{-1}$$

$$2^0$$

$$2^1$$

$$2^2$$

$$2^3$$

$$\log_2(.25)$$

$$\log_2(.5)$$

$$\log_2(1)$$

$$\log_2(2)$$

$$\log_2(4)$$

$$\log_2(8)$$

$$10^{-2}$$

$$10^{-1}$$

$$10^0$$

$$10^1$$

$$10^2$$

$$10^3$$

$$\log_{10}(.01)$$

$$\log_{10}(.1)$$

$$\log_{10}(1)$$

$$\log_{10}(10)$$

$$\log_{10}(100)$$

$$\log_{10}(1000)$$

**2.** Graph the following:

$$y = 2^x$$

$$y = \log_2 x$$

$$y = 10^x$$

$$y = \log_{10} x$$