What is a LOG?

Why do we need it? How does it help us? How do we use it?

Section #1 Exploring Inverse Equations

Section #2 Writing an exponential equation as a logarithmic equation

Section #3 Evaluating Logs

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

(b)
$$\log_2 8$$

(c)
$$\log_6 36$$

(d)
$$\log_3 81$$

(e)
$$\log_2 \frac{1}{4}$$

(f)
$$\log_{\frac{1}{2}} 32$$

(g)
$$\log_5 125$$

(h)
$$\log_6 \sqrt{6}$$

(i)
$$\log_2 \sqrt[5]{64}$$

(k)
$$\log_{16} \frac{1}{4}$$

(I)
$$\log_2(\sqrt[3]{4} \times 8)$$

(m)
$$\log 1000\,$$

(n)
$$\log 0.1$$