

LOGARITHMIC EQUATIONS

NAME: _____

Solve the following logarithmic equations.

(01). $\frac{\log_2(x) + 1}{\log_2(x) + 3} = \frac{4}{5}$

(02). $\log_2(x) \cdot \log_3(x + 3) = 0$

(03). $[\log_5(x + 8)]^2 = 0$

(04). $9[\log_3(x)]^2 - 27[\log_3(x)] = 0$

(05). $2[\log_5(x)]^2 = 6[\log_5(x)]$

(06). $[\log_2(x + 3)]^2 = 4$

(07). $4[\log_3(x)]^2 - 1 = 0$

(08). $[\log_2(x)] \cdot [2 \log_2(x) - 3] = 0$

(09). $[\log_2(x + 1)]^2 = 25$

(10). $[\log_2(x)]^2 - 3 \log_2(x) + 2 = 0$

(11). $[\log_5(x)]^2 + 2 \log_5(x) = 0$

(12). $[\log_5(x + 2) - 2] \cdot [\log_3(x - 8) - 3] = 0$

(13). $\log_6(x + 1) + \log_6(x + 5) = 3$

(14). $\log_2(x - 3) + \log_2(x) = 2$