Expanding Logarithmic Expressions

Expand each expression.

1) $\log_t\left(\frac{x^2}{y}\right)$ = _____

2) $3\log_2 a^2 b^3$ = _____

3) $\log_6\left(\frac{\sqrt{g}}{h}\right)$ = _____

4) $\log_a\left(\frac{m}{2}\right)^4$ = _____

5) $\log_d \sqrt[3]{8\,c^7}$ = _____

6) $2\log_9 k^6$ = _____

7) $\log_{10}\left(\frac{p}{q^2}\right)^5$ = _____

8) $\log_m (rs)^3$ = _____

9) $4\log_n\left(\frac{5}{w}\right)$ = _____