

Evaluate. Round answers to nearest hundredth if necessary.

1. $\log_2 8 + 5^{\log_5 7} - \log_4 64$ 7 2. $\log_7 7^4 - \log_4 75$ 0.89

Solve for x. Round answers to nearest hundredth if necessary.

3. $\log_3 2 + \log_3 x = \log_3 (x^2 - 15)$ $x = 5$ 4. $4 = \log_x 200$ $x \approx 3.76$

Simplify. State any domain restrictions.

5. $\frac{27x^3 - 8}{9x^2 - 4} \cdot \frac{9x^2 + 6x + 4}{3x + 2}, x \neq \pm \frac{2}{3}$ 6. $\frac{x^2 - 9x + 20}{x^2 - 2x - 8} \cdot \frac{x - 5}{x + 2}, x \neq 4, -2$

Chapter 7 Test is on Friday