Algebra 2 Mr. Clausen Name_____
Ch 10 Section 5 Worksheet Period _____

Do NOT use a calculator for the following problems.

If $\log_a 2 \approx 0.43$ and $\log_a 3 \approx 0.68$, find the approximate value of the following logs. (These are not logs base 10, so your calculator will not help you find the correct log value.)

1 $\log_a 6$ _____

2 $\log_a 9$ _____

3 $\log_a \frac{3}{2}$ _____

4 $\log_a 12$ _____

5 $\log_a 24$ _____

6 $\log_a 1$ _____

7 $\log_a 36$ _____

8 $\log_a \sqrt{3}$ _____

9 $\log_a \sqrt[4]{2}$ _____

10 $\log_a \sqrt[3]{\frac{2}{3}}$ _____

11 $\log_a \frac{1}{9}$ _____

12 $\log_a 5$ _____

13 $\log_a \frac{4}{9}$ _____

14 $\log_a \sqrt{12}$ _____

15 $\log_a \sqrt{2}$ _____

16 $\log_a \sqrt[3]{12}$ _____

17 $\log_a \frac{4}{27}$ _____

18 $\log_a \frac{9}{16}$ _____