

Section 3-2

Method of Scoring. If you answer a question correctly, the dollar value of that question is added to your total. If you miss a question, the dollar value is *subtracted* from your total. So think carefully before you answer!

Instructions. Solve the problems in any order you wish. If your total at the end is more than \$1500, you will be declared **Precalcerrific!**

Important: Acrobat Reader 4.0 or later required.

To Begin: Press Page Down to go to the next page.

Exponents	Logs I	Logs II

Exponents

For \$100: $\left(-\frac{1}{2}\right)^{-2}$ equals

(a) 1

(b) $-\frac{1}{4}$

(c) $\frac{1}{4}$

(d) 4

(e) -4

Exponents

For \$200: $4^{3/2}$ equals

(a) 6

(b) $\frac{8}{3}$

(c) $\sqrt[3]{16}$

(d) $\sqrt{12}$

(e) 8

Exponents

For \$300: $16^{-3/4}$ equals

(a) -12

(b) 12

(c) 8

(d) -8

(e) $\frac{1}{8}$

Logs I

For \$100: $\log_6 36$ equals

(a) 6

(b) 4

(c) 2

(d) $\frac{1}{2}$

(e) $\frac{1}{6}$

Logs I

For \$200: $\log_3 \frac{1}{9}$ equals

(a) $\frac{1}{3}$

(b) 3

(c) $-\frac{1}{2}$

(d) $\frac{1}{27}$

(e) -2

Logs I

For \$300: $\log_9 3$ equals

(a) $\frac{1}{3}$

(b) $\frac{1}{2}$

(c) -2

(d) -3

(e) $-\frac{1}{3}$

Logs II

For \$100: $\log_9 27$ equals

(a) $\frac{3}{2}$

(b) 3

(c) $-\frac{1}{3}$

(d) -3

(e) $\frac{1}{3}$

Logs II

For \$200: What is the domain of

$$y = \ln(2x + 5)?$$

(a) $(0, +\infty)$

(b) $(2/5, +\infty)$

(c) $(-\infty, -5/2)$

(d) $(-5/2, +\infty)$

(e) $(1, +\infty)$

Logs II

For \$300: The graph of $f(x) = 2 \ln(x - 2) + 5$ has an asymptote. The equation of this asymptote is

(a) $y = 2$

(b) $x = 3$

(c) $x = -2$

(d) $y = 5$

(e) $x = 2$