

Math142 Quiz # 4

Name: \_\_\_\_\_

Section \_\_\_\_\_

Seat # \_\_\_\_\_

Reason for Absence: \_\_\_\_\_  

---

1. Given  $\log_b(2) = \heartsuit$ ,  $\log_b(3) = \clubsuit$ , and  $\log_b(5) = \diamond$ , find the value of  $\log_b(1200)$ .

2. The total cost and the total revenue (in dollars) for the production and sale of  $x$  computers are given by:

$$C(x) = 4505 + 850x \text{ and } R(x) = 1200x - 5x^2 \text{ Find the break even point(s).}$$

3. Find the derivative of:  $f(x) = 5x^3 - 6\sqrt{x} + 120x - \frac{48}{x} + 26$