

(10pts) NAME (printed neatly): _____

(10pts) Section Number (circle correct section): 521_(9:10am) 522_(10:20am) 514_(11:30am) 525_(1:50pm)

Problems 1 – 3. (10 pts each) Write out *true* or *false*; do not abbreviate.

TRUE_____ 1. To be excused you must notify your instructor (acknowledged email or written) prior to date of absence if such notification is feasible. Consistent with Texas A&M Student Rules, students are required to notify their instructor by the end of the second working day after missing an examination or assignment.

TRUE_____ 2. Dr. Sherry highly recommends the Math 141 week-in-reviews, help sessions, her office hours, attending class, doing my suggested text homework, skimming the class notes ahead of time, and keeping up with the class material.

TRUE_____ 3. TI83/84 or TI83/84 Plus graphing calculator is required for this course, and I should bring it to Math 141 class every day. Calculators are not allowed to be shared on exams or quizzes, and my name should be permanently engraved or written on it.

3. (10pts) What three things has Dr. Sherry requested be put in the subject line of every email I send Dr. Sherry to help her best help me?

name (first and last), **141** (or math 141) and my **section number**

4. A snowman accessory company has monthly fixed costs of \$67005. If 10000 snowman accessories are produced and sold, each for \$20, there is a loss of \$17005.

a. (20pts) Find the linear cost function.

$$C(x) = cx + F$$

$$C(x) = cx + 67005$$

$$R(x) = sx$$

$$R(x) = 20x$$

$$P(x) = R(x) - C(x)$$

$$P(x) = 20x - cx - 67005$$

$$P(10000) = 20(10000) - c(10000) - 67005 = -17005$$

$$10000c = 150000$$

$$c = 15$$

$$\therefore C(x) = 15x + 67005$$

b. (20pts) What is the revenue break-even point?

Include units in your point [for example: (5 pounds, 70 inches)].

$$C(x) = R(x)$$

$$15x + 67005 = 20x$$

$$5x = 67005$$

$$x = 13401$$

$$R(13401) = 268020$$

\therefore (13401 snowman accessories, \$268020)