

Math 111 Pre- Test 1 – Sep 2012

name (printed)

student number

Instructions:

1. There are **6 pages** (including this cover page) in the test. You will be given **75 minutes** to write the test. Justify every answer, and clearly show your work. Unsupported answers will receive no credit. Read over the test before you begin.
2. The last page is for scrap work. Put your name on the scrap paper and return it along with your completed test. **To be considered for grading, your test must include the scrap paper with your name on it.**
3. A non-programmable, non-graphing calculator is permitted, however calculators may not be shared.
4. At the end of the test you will be given the instruction to stop writing. **Continuing to write after this instruction is cheating.**
5. **Academic dishonesty:** Exposing your paper to another student, copying material from another student, or representing your work as that of another student constitutes academic dishonesty. Cases of academic dishonesty may lead to a zero grade in the test, a zero grade in the course, and other measures, such as suspension from this university.

question	value	score
1		
2		
3		
4		
Total		

Question 1:

(a)[points] Determine the slope and y -intercept of the line $x - 2y = 0$.

(b)[points] Determine an equation of the horizontal line through $(3, -7)$.

(c)[**points**] Determine an equation of the line through the points $(-3, 1)$ and $(3, -1)$.

(d)[**points**] Determine an equation of the line that is perpendicular to the line $x - 2y = -3$ and passes through the point $(-3, 8)$.

Question 2:**(a)[points]** Graph two lines on one grid

$$L : 4x - y = -7$$

$$M : 4x + y = -1.$$

Question 3:

- (a) [points] In 1999 the cost of an average in Nanaimo was \$170,000. In 2007 the cost was \$370,000. Assuming that the relationship between time and cost is linear, develop a formula for predicting the cost of an average home in 2015. Is this assumption realistic? Explain.

Question 4:

(a) [points] A certain product has supply equation $S = 65p + 500$ and a market price of \$50. Each \$5 increase in price reduces demand by 100 units. At what price does demand drop to 1000 units?

Question 5:

(a) [points] Use your text to do #46 in Sec 1.2, #18 in Sec 1.3, # 40 and #42 from Chapter 1 Review.