

MA180 Spring 2007 Extra Credit Quiz 1A to be Added to Quiz 1

Name: _____

1) An open box with a square base is required to have a volume of 27 cubic feet. Express the amount A of material (used to make such a box) as a function of the length x of a side of the base.

2) Find the average rate of change for the function $f(x) = \frac{3}{x-2}$ between $X = 4$ to $X = 7$.

3) Given $f(x) = 3x^2 - 5x + 2$ Evaluate $\frac{f(x+h) - f(x)}{h}$, where $h \neq 0$

4) City B is located at 100 miles east and 50 miles north of city A. City C is located at 75 miles west and 150 miles south of city A. Find the distance between city B and city C. You can choose city A as the origin of the rectangular coordinate system. Write your answer rounded to two decimal places, if necessary.