Math 1314 ONLINE
Popper 13, Part 2

Enter answers by 11:59 p.m. on 4/17/2013.

POPPER 13, question 6:

Find the area between $f(x) = x^2 + 3$ and $g(x) = x - 2$ between the vertical lines $x = -1$ and $x = 2$.

A. 16.5 B. 5.8333 C. 1.8333 D. 4.5

Popper 13, Question 7

A company finds that the percent of its locations that experience a profit in the first year of business has the probability density function $P(x) = \frac{36}{11} x\left(1 - \frac{1}{3}x\right)^2$, $0 \le x \le 1$. What is the probability that between 20% and 50% of the company's locations experienced a profit during the first year of business?

A. 0.4720 B. 0.2416 C. 0.2641 D. 0.3514

POPPER 13, question 8:

Suppose $f(x, y) = 2x^2 - 7xy + 5y^3$. Find $f(-1, 2)$.

A. 36 B. 28 C. 56 D. 32

POPPER 13, Question 9:

Suppose $f(x, y) = 2x^2 - 7xy + 5y^3$. Find f_x.

A. $f_x = 4x - 7y + 15y^2$ B. $f_x = 4x - 7y$
C. $f_x = -7x + 15y^2$ D. $f_x = 4x - 7xy$

POPPER 13, Question 10:

Suppose $f(x, y) = 2x^2 - 7xy + 5y^3$. Find f_y.

A. $f_x = 4x - 7y + 15y^2$ B. $f_x = 4x - 7y$
C. $f_x = -7x + 15y^2$ D. $f_x = 4x - 7xy$