

Section 004 of Calculus Lab 2, Name (clearly printed): _____
Quiz of January 24, 2002 (Friday) ID #: _____
10:00-10:15 a.m.

1. Without using palettes, clearly print MATHEMATICA input commands for:

- (a) the definition of $f(x) = 2x^3 - 18x^2 + 46x - 30$ (without any restriction);
- (b) the definition of $g(x) = x^3 - 12x^2 + 44x - 48$ (without any restrictions); and
- (c) a single graph of both $y = f(x)$ and $y = g(x)$ over the interval $-2 \leq x \leq 8$.

2. Without using palettes, clearly print MATHEMATICA-Input statements whose evaluation finds numerical values (accurate to at least four digits) for the simultaneous solutions (x, y) of the system of equations

$$\begin{aligned} 3x^3 - 2x^2y + 2xy^2 - y^3 &= 17 \\ 4x^3 + x^2y - y^3 &= 25. \end{aligned}$$

(End of Quiz)