



measurement are required. Each problem has the same point-value.

1. Given $f(x) = 2x^2 - 5x + 3$ and $g(x) = x^2 - 4x + 6$, find $(f \circ g)(x)$.

Find the value of k such that the system $\begin{cases} x^2 + y^2 = 25 \\ x^2 + y^2 - 4x - 6y + k = 0 \end{cases}$ has a unique solution. Express your answer in the form $k = \frac{a}{b}$, where a and b are relatively prime positive integers.

the value of k . Express your answer as an exact decimal.

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Name: _____

Team Code: _____

2015 Fall OIR MATHS LG

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