

King Fahd University of Petroleum and Minerals
Department of Mathematical Sciences
Math 201, Sections: 3, 6, 13 (061)
Quiz 5(a)

Time: 15 Minutes

Marks: _____/9

Name: _____ Section #: _____

ID #: _____ Serial #: _____

1. Use double iterated integrals to find volume of the solid bounded by the graphs of cylinder $x^2 + y^2 = 4$ and the planes $y + z = 4$ and $z = 0$.

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Quiz 5(b)

Time: 15 Minutes

Marks: _____/9

Name: _____ Section #: _____

ID #: _____ Serial #: _____

1. Use polar coordinates to:

(a) Evaluate $\int_0^2 \int_0^{\sqrt{2x-x^2}} (x^2 + y^2) dy dx$.

(b) find volume of solid bounded by $z = 4 - x^2 - y^2$ and the xy -plane.

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Quiz 5(c)

Time: 15 Minutes

Marks: _____/9

Name: _____ Section #: _____

ID #: _____ Serial #: _____

1. Use double iterated integrals to find area of the region bounded by the graphs of $x = y^3$, $x + y = 2$ and $y = 0$.

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Quiz 5(d)

Time: 15 Minutes

Marks: _____/9

Name: _____ Section #: _____

ID #: _____ Serial #: _____

1. Evaluate:

(a) $\int_1^2 \int_x^2 x \sqrt{1+y^3} dy dx.$

(b) $\int_0^2 \int_{y/2}^1 \cos(x^2) dx dy.$