Unit 4 - Week 03- Integration Of Real Functions

Assignment-3

The due date for submitting this assignment has passed. Due on 2017-02-14, 23:59 IST.
As per our records you have not submitted this assignment.

1) 1. *Using Leibnitz rule, find* $\frac{d}{dx}\int_{cosx}^{sinx}\frac{1}{1-t^2}dt$ *1 point*

- $\frac{1}{sinx}+\frac{1}{cosx}$
- $\frac{1}{sinx}-\frac{1}{cosx}$
- $\frac{1}{cosx}-\frac{1}{sinx}$
- $-\frac{1}{sinx}-\frac{1}{cosx}$

No, the answer is incorrect.
Score: 0

Accepted Answers:
$\frac{1}{sinx}+\frac{1}{cosx}$

2) 2. *The area between the curves* $x=y^2$ *and* $x=2y-y^2$ *is* *1 point*

- 3
- $\frac{1}{3}$
- $\frac{2}{3}$
- 0

No, the answer is incorrect.
Score: 0

Accepted Answers:
$\frac{1}{3}$

3) 3. *The area enclosed by the curves* $x=-y^2$ *and the line* $y=x+2$*is* *1 point*

- $\frac{9}{2}$
- $\frac{7}{2}$

Continuity, Differentiability, Unconstrained and Constrained minimization

Week - 05 - Infinite Series, Multiple Integrals

3

4

No, the answer is incorrect.
Score: 0

Accepted Answers:
$\frac{9}{2}$

4) 4. $\int_0^{2\pi} \sqrt{\frac{1-\cos x}{2}}\,dx =$ 1 point

2

1

4

0

No, the answer is incorrect.
Score: 0

Accepted Answers:
4

5) 5. $\int sec^2 t\ tan(tant)dt =$ 1 point

$sec(tant) + c$

$tan(sect) + c$

$ln(tan(sect)) + c$

$ln(sec(tant)) + c$

No, the answer is incorrect.
Score: 0

Accepted Answers:
$ln(sec(tant)) + c$

6) 6. $\int_0^{\pi}\int_0^{\pi}\int_0^{\pi} \cos(u+v+w)dudvdw$ 1 point

1

0

-1

-2

No, the answer is incorrect.
Score: 0

Accepted Answers:
0

7) 7. *The volume of the solid generated by revolving the regions bounded by the curves and lines* $y = 2x - 1,\ y = \sqrt{x},\ x = 0$ *about* $y -$ *axis is* 1 point

$\frac{3\pi}{8}$

- $\frac{2\pi}{5}$
- $\frac{8\pi}{15}$
- $\frac{7\pi}{15}$

No, the answer is incorrect.
Score: 0

Accepted Answers:
$\frac{7\pi}{15}$

8) 8. *The value of the improper integral* $\int_3^\infty \frac{2\,du}{u^2-2u}$ *is* **1 po**

- $-\infty$
- $\ln 2$
- $\ln 3$
- $-\ln 3$

No, the answer is incorrect.
Score: 0

Accepted Answers:
$\ln 3$

9) **1 point**

9. *If a function f is not differentiable at some points, then it is not Riemann integrable*

- *True*
- *False*

No, the answer is incorrect.
Score: 0

Accepted Answers:
False

10) 10. *Any bounded monotone function is always Riemann integrable.* **1 point**

- *True*
- *False*

No, the answer is incorrect.
Score: 0

Accepted Answers:
True

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