Answer Submitted.
X

Week 4: Assignment 4 (Non Graded)

Assignment not submitted
Note : This assignment is only for practice purpose and it will not be counted towards the Final score

1) Which of the following plots is useful for visualizing the optimization problem? ***1 point***

- Scatter plot
- Box plot
- Contour plot
- Bar plot

No, the answer is incorrect.
Score: 0
Accepted Answers:
Contour plot

2) If $f(x) = 5x^4 - 30x^3 + 40x^2 - 60$, then the first order necessary condition for either maxima or minima of $f(x)$ is ***1 point***

- $20x^3 - 90x^2 - 80 = 0$
- $20x^3 - 80x^2 - 90x = 0$
- $20x^2 - 90x^2 + 80 = 0$
- $20x^3 - 90x^2 + 80x = 0$

No, the answer is incorrect.
Score: 0

Accepted Answers:
$20x^3 - 90x^2 + 80x = 0$

3) For a function $f(x) = 5x^4 - 30x^3 + 40x^2 - 60$, which of the following value is a stationary point of $f(x)$ ***1 point***

- [ ] 4
- [ ] 0.2
- [x] 3.28
- [ ] 0

Partially Correct.
Score: 0.5

Accepted Answers:
3.28
0

4) The maximization of a function $f(\bar{x})$ is equal to the _____ of the function -$f(\bar{x})$ ***1 point***

- ○ First derivative
- ○ Second derivative
- ◉ Minimization
- ○ Maximization

Yes, the answer is correct.
Score: 1

Accepted Answers:
Minimization

5) For a function $f(x) = 3x^4 - 4x^3 - 12x^2 + 45$, which of the following are stationary points and minimisers of $f(x)$ ***1 point***

- ○ 0,-2.5
- ◉ 2, -1
- ○ 0.25,2
- ○ 2, -2.5

Yes, the answer is correct.
Score: 1

Accepted Answers:
2, -1

Check Answers and Submit

Your score is: 2.5/5