

**Courses » Introduction to Machine Learning**

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# Unit 1 - How to access the portal ?

## Course outline

### How to access the portal ?

- ☒ How to access the homepage ?
- ☐ How to access the course page ?
- ☐ How to access the MCQ, MSQ and Programming assignments?
- ☐ Quiz : Assignment 0

### Week 1

## Assignment 0

**Due date for this assignment:** 2018-08-28, 23:59 IST.

1) In a box, there are 8 red, 7 blue and 6 green balls. One ball is picked up randomly. What is the probability that it is neither red nor green? **1 point**

- ☒ A. 1/3
- ☐ B. 3/4
- ☐ C. 8/21
- ☐ D. 7/19

**Yes, the answer is correct.****Score: 1****Accepted Answers:****A. 1/3**

2) Three unbiased coins are tossed. What is the probability of getting at most two heads? **1 point**

- ☐ A. 3/4
- ☐ B. 1/4
- ☐ C. 3/8
- ☒ D. 7/8

**Yes, the answer is correct.****Score: 1****Accepted Answers:****D. 7/8**

3) In how many different ways can the letters of the word 'LEADING' be arranged in such a way that the vowels always come together? **1 point**

- ☐ A. 360
- ☐ B. 480
- ☒ C. 720
- ☐ D. None

**Yes, the answer is correct.****Score: 1****Accepted Answers:****C. 720**

4) A bag contains 4 white, 5 red and 6 blue balls. Three balls are drawn at random from the bag. **1 point**  
The probability that all of them are red, is:

- ☐ A. 1/22  
☐ B. 3/22  
☒ C. 2/91  
☐ D. 2/77

**Yes, the answer is correct.**

**Score: 1**

**Accepted Answers:**

*C. 2/91*

5) In a group of 6 boys and 4 girls, four children are to be selected. In how many different ways **1 point**  
can they be selected such that at least one boy should be there?

- ☐ A. 159  
☐ B. 194  
☐ C. 205  
☒ D. 209

**Yes, the answer is correct.**

**Score: 1**

**Accepted Answers:**

*D. 209*

6) For a skew symmetric odd ordered matrix A of integers, which of the following will hold true: **1 point**

- ☐ A.  $\det(A) = 9$   
☐ B.  $\det(A) = 25$   
☒ C.  $\det(A) = 0$   
☐ D.  $\det(A) = 7$

**Yes, the answer is correct.**

**Score: 1**

**Accepted Answers:**

*C.  $\det(A) = 0$*

7) The function  $f(x) = x^3 - 6x^2 + 9x + 25$  has **1 point**

- ☒ A. a maxima at  $x = 1$  and a minima at  $x = 3$   
☐ B. a maxima at  $x = 3$  and a minima at  $x = 1$   
☐ C. no maxima, but a minima at  $x = 1$   
☐ D. a maxima at  $x = 1$ , but no minima

**Yes, the answer is correct.**

**Score: 1**

**Accepted Answers:**

*A. a maxima at  $x = 1$  and a minima at  $x = 3$*

8) **1 point**

$$\frac{d}{dx}(e^{xy}) = ?$$

- ☒ A.  $e^{xy}(y + x \cdot \frac{dy}{dx})$   
☐ B.  $e^{xy}(1 + x \cdot \frac{dy}{dx})$

- ☐ C.  $e^{xy}(y + x)$
- ☐ D.  $e^{xy}$

Yes, the answer is correct.

Score: 1

Accepted Answers:

A.  $e^{xy}(y + x \cdot \frac{dy}{dx})$

9)  $P = \begin{bmatrix} 10 & 3 \\ 4 & -1 \end{bmatrix}$  and  $Q = \begin{bmatrix} 2 & -6 \\ 0 & 8 \end{bmatrix}$ . What is  $2P+3Q$ ?

1 point

- ☒ A.  $\begin{bmatrix} 26 & -12 \\ 5 & 22 \end{bmatrix}$
- ☐ B.  $\begin{bmatrix} 12 & -3 \\ 4 & 7 \end{bmatrix}$
- ☐ C.  $\begin{bmatrix} 25 & -12 \\ 4 & 22 \end{bmatrix}$
- ☐ D.  $\begin{bmatrix} 11 & -12 \\ 4 & -22 \end{bmatrix}$

Yes, the answer is correct.

Score: 1

Accepted Answers:

A.  $\begin{bmatrix} 26 & -12 \\ 5 & 22 \end{bmatrix}$

10) What is the derivative of  $f(x) = |x|$  at  $x = 0$ ?

1 point

- ☐ A. 1
- ☐ B. -1
- ☐ C. 0
- ☒ D. Doesn't exist

Yes, the answer is correct.

Score: 1

Accepted Answers:

D. Doesn't exist

You may submit any number of times before the due date. The final submission will be considered for grading.

Check Answers

Your score is: 10/10

Submit Answers

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