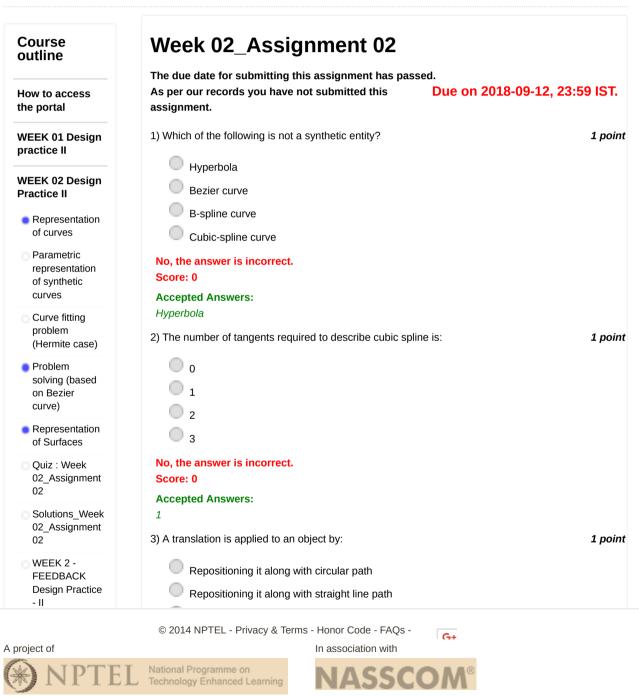
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Courses » Design Practice - II

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Unit 3 - WEEK 02 Design Practice II





Funded by

| Practice II | | 4) In 2D-translation, a point (X, Y) can move to the new position (X', Y') by using the equation | 1 point |
|-------------------------------|-------|--|---------|
| WEEK 06 Design | ce De | \bigcirc X'=X+dX and Y' = Y+dX | |
| Practice II | | X'=X+dY and $Y'=Y+dX$ | |
| WEEK 07 Design Practice II | | \bigcirc X'=X+dX and Y' = Y+dY | |
| | | \bigcirc X'=X-dX and Y' = Y-dX | |
| WEEK 08 Design Practice II | | No, the answer is incorrect. Score: 0 | |
| | | Accepted Answers: X'=X+dX and Y' = Y+dY | |
| | | 5) The translation distances (dx, dy) is called as | 1 point |
| | | Translation vector | |
| | | Shift vector | |
| | | Both Translation and shift vector | |
| | | None of them are true | |
| | | No, the answer is incorrect. Score: 0 | |
| | | Accepted Answers: | |
| | | Both Translation and shift vector | 4 |
| | | 6) The basic geometric transformations are: | 1 point |
| | | Translation | |
| | | Scaling | |
| | | Rotation | |
| | | all of these | |
| | | No, the answer is incorrect. Score: 0 | |
| | | Accepted Answers: | |
| | | all of these | |
| | | 7) is a rigid body transformation that moves objects without deformation. | 1 point |
| | | Rotation | |
| | | Scaling | |
| | | Translation | |
| | | all of these | |
| | | No, the answer is incorrect. Score: 0 | |
| | | Accepted Answers: Translation | |
| | | 8) To change the position of a circle or ellipse we translate | 1 point |
| | | Center coordinates | |
| | | Center coordinates and redraw the figure in new location | |
| | | Outline coordinates | |
| | | All of the mentioned | |
| | | | |

No, the answer is incorrect.

Score: 0

Accepted Answers:

Center coordinates and redraw the figure in new location

9) **1 point**

A unit square is transformed by a 2×2 transformation matrix. The resulting position vectors are:

 $[X'] = \begin{bmatrix} 0 & 0 \\ 2 & 3 \\ 8 & 4 \\ 6 & 1 \end{bmatrix}$ Determine the transformation matrix used.

- $\begin{bmatrix} 2 & 3 \\ 4 & 1 \end{bmatrix}$
- $\begin{bmatrix} 2 & 3 \\ 0 & 1 \end{bmatrix}$
- $\begin{bmatrix} 2 & 0 \\ 8 & 0 \end{bmatrix}$
- 2 3 8 4

No, the answer is incorrect.

Score: 0

Accepted Answers:

$$\begin{bmatrix} 2 & 3 \\ 4 & 1 \end{bmatrix}$$

10) Consider a triangle whose vertices are (2 2), (4 2) and (4 4). Find out the transformed 1 point vertices using the concatenation method of the triangles as it be rotated by 90 degrees about the origin followed by reflection through the line y = -x.

- [-2 2 4 2 -4 4
- $\begin{bmatrix} 2 & -2 \\ 4 & -2 \\ 4 & -4 \end{bmatrix}$
- -2 2 -4 2 -4 4
 - $\begin{bmatrix} -2 & 2 \\ -4 & 6 \\ -6 & 4 \end{bmatrix}$

No, the answer is incorrect. Score: 0

Accepted Answers:

$$\begin{bmatrix} -2 & 2 \\ -4 & 2 \\ -4 & 4 \end{bmatrix}$$

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