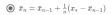
Fractice Quiz • 13 min • 0 total poi	105		
0	Congratulations! You passed! Grade received 100% To pass 80% or higher	Go to next item	
	What is the mean of the dataset $\mathcal{D}=\{1,2,3\}$? Do the exercises using pen and paper. $ \bigcirc \ \ 3 $ $ \bigcirc \ \ 2 $ $ \bigcirc \ \ 6 $ $ \bigcirc \ \ \bigcirc \ \ $ Correct That's it. Good job!	1/1 point	
	Compute the mean of the following dataset: $\mathcal{D} = \Big\{ \begin{bmatrix} 1\\4\\7 \end{bmatrix}, \begin{bmatrix} 2\\5\\8 \end{bmatrix}, \begin{bmatrix} 3\\6\\9 \end{bmatrix} \Big\}$ Do the exercises using pen and paper.	1/1 point	·
3.		1/1 point	
4.		1/1 point	

5. Assuming that we know the mean \bar{x}_{n-1} of a dataset \mathcal{D}_{n-1} with n-1 data points. Now, suppose that we collect another data point, which we denote by x_* . Select the correct formula that computes the correct new mean \bar{x}_n of the full data set $\mathcal{D}_n = \mathcal{D}_{n-1} \cup \{x_*\}$, i.e., we add x_* to the dataset \mathcal{D} .

1/1 point



$$\bigcirc \ \bar{x}_n = \bar{x}_{n-1} + \frac{1}{n+1}(x_* - \bar{x}_{n-1})$$

$$\bigcirc \bar{x}_n = \bar{x}_{n-1} + \frac{1}{n+1}(\bar{x}_{n-1} - x_*)$$

$$\bigcap \bar{x}_n = \bar{x}_{n-1} + \frac{1}{n-1}(x_* - \bar{x}_{n-1})$$



6. Assuming you are given an image as a two dimensional array of shape 28 x 28. Write a small piece of python code to reshape this image to a vector of length 784 (=28 x 28).

1 / 1 point

Hint: This can be a one-liner.

```
import numpy as np

def reshape(x):

def reshape(x):

"""return x_reshaped as a flattened vector of the multi-dimensional array x"""

x_reshaped = np.reshape(x, ((-1,)))

return x_reshaped

Run

Reset
```

