

Congratulations! You passed!

Grade received 100% Latest Submission Grade 100% To pass 70% or higher

Go to next item

 $\textbf{1.} \quad \text{In the training set below, what is } x_4^{(3)} ? \text{ Please type in the number below (this is an integer such as 123, no decimal points)}.$

1/1 point

Size in feet ²	Number of bedrooms	Number of floors	Age of home in years	Price (\$) in \$1000's
X ₁	X ₂	Хз	X4	
2104	5	1	45	460
1416	3	2	40	232
1534	3	2	30	315
852	2	1	36	178
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Yes! $x_4^{(3)}$ is the 4th feature (4th column in the table) of the 3rd training example (3rd row in the table).

Which of the following are potential benefits of vectorization? Please choose the best option.

O It makes your code run faster

O It can make your code shorter

O It allows your code to run more easily on parallel compute hardware

All of the above

⊘ Correct

⊘ Correct

Correct! All of these are benefits of vectorization!

 $\textbf{3.} \quad \mathsf{True/False?} \ \mathsf{To} \ \mathsf{make} \ \mathsf{gradient} \ \mathsf{descent} \ \mathsf{converge} \ \mathsf{about} \ \mathsf{twice} \ \mathsf{as} \ \mathsf{fast}, \ \mathsf{a} \ \mathsf{technique} \ \mathsf{that} \ \mathsf{almost} \ \mathsf{always} \ \mathsf{works} \ \mathsf{is} \ \mathsf{to} \ \mathsf{double} \ \mathsf{the} \ \mathsf{learning} \ \mathsf{rate} \ \mathsf{alpha}.$

1/1 point

1/1 point

False

O True

⊘ Correct

Doubling the learning rate may result in a learning rate that is too large, and cause gradient descent to fail to find the optimal values for the parameters w and b.