

✓ **Congratulations! You passed!**

Go to next item

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

1. In the training set below, what is $x_4^{(3)}$? 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	x_3	x_4	
2104	5	1	45	460
1416	3	2	40	232
1534	3	2	30	315
852	2	1	36	178
...

30

✓ **Correct**

Yes! $x_4^{(3)}$ is the 4th feature (4th column in the table) of the 3rd training example (3rd row in the table).

2.

1 / 1 point

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

- ☐ It makes your code run faster
- ☐ It can make your code shorter
- ☐ It allows your code to run more easily on parallel compute hardware
- ☒ All of the above

✓ **Correct**

Correct! All of these are benefits of vectorization!

3. True/False? To make gradient descent converge about twice as fast, a technique that almost always works is to double the learning rate α .

1 / 1 point

- ☒ False
- ☐ 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 .