



&lt; Previous



Next &gt;

Notifications



## In-Video Quiz

Bookmark this page

### Q1

1/1 point (ungraded)

Consider a relation  $R(A,B,C,D)$  with functional dependencies  $A,B \rightarrow C$  and  $C,D \rightarrow E$ . Suppose there are at most 3 different values for each of  $A$ ,  $B$ , and  $D$ . What's the maximum number of different values for  $E$ ?

☒ 27☐ 9☐ 3☐ 81

### Explanation

There are at most  $3 \times 3 = 9$  combinations of  $A, B$  values, so by  $A, B \rightarrow C$  at most 9 different values for  $C$ . With at most 3 different values for  $D$ , by  $C, D \rightarrow E$  there are at most  $9 \times 3 = 27$  different values for  $E$ .

Submit

You have used 2 of 4 attempts

&lt; Previous

Next &gt;

### Pursue a verified certificate

- ✓ Earn a **verified certificate** of completion to showcase on your resumé
- ✓ Support our **mission** at edX

Upgrade for \$50

**edX**[About](#)[Affiliates](#)[edX for Business](#)

Hide Notes

[Open edX](#)  
[Careers](#)  
[News](#)

## Legal

[Terms of Service & Honor Code](#)  
[Privacy Policy](#)  
[Accessibility Policy](#)  
[Trademark Policy](#)  
[Sitemap](#)

## Connect

[Blog](#)  
[Contact Us](#)  
[Help Center](#)  
[Media Kit](#)



© 2022 edX LLC. All rights reserved.  
深圳市恒宇博科技有限公司 [粤ICP备17044299号-2](#)