<u>Course</u> > <u>Week 3</u>... > <u>3.16 Co</u>... > Quiz 3

## Quiz 3

1

1/1 point (graded)  $|A \cup B| = |A| + |B|$ when

- $lap{1}{2} A$  and B are disjoint,  $lap{1}{2}$
- ightharpoons A is the complement in B, ightharpoons
- ightharpoons A and B do not intersect, ightharpoons
- lacksquare One of A and B is empty.  $\checkmark$



Submit

**1** Answers are displayed within the problem

2

1/1 point (graded)

from slow to fast, rank the functions  $n^2$ ,  $2^n$ , n in terms of their growth speed as n increases.

 $\bullet$   $n, n^2, 2^n \checkmark$ 

Correct: Video: Counting - Cartesian Products  Submit  Answers are displayed within the problem  Answers are displayed within the problem  The point (graded)  The set of functions $P^Q$ represents:  The set of functions from $P$ to $P$ The number of functions from $P$ to $P$ The number of functions from $P$ to $P$ The number of functions from $P$ to $P$	● $2^n, n, n^2$ ● $2^n, n^2, n$ Answer Correct: Video: Counting - Cartesian Products  Submit  ● Answers are displayed within the problem  3  1/1 point (graded) For sets $P$ and $Q$ , the notation $P^Q$ represents:  ● The set of functions from $Q$ to $P$ ● The number of functions from $Q$ to $P$ • The number of functions from $P$ to $Q$ Answer Correct: Video: Counting - Cartesian Products	
Answer Correct: Video: Counting - Cartesian Products  Submit  Answers are displayed within the problem  Answers are displayed within the problem  13  1/1 point (graded) For sets $P$ and $Q$ , the notation $P^Q$ represents:  The set of functions from $Q$ to $P$ The set of functions from $P$ to $Q$ The number of functions from $P$ to $Q$ The number of functions from $P$ to $Q$ Answer Correct: Video: Counting - Cartesian Products  Submit	Answer Correct: Video: Counting - Cartesian Products  Submit  Answers are displayed within the problem  Answers are displayed within the problem  The point (graded)  For sets $P$ and $Q$ , the notation $P^Q$ represents:  The set of functions from $Q$ to $P$ The set of functions from $P$ to $Q$ The number of functions from $P$ to $Q$ Answer  Correct: Video: Counting - Cartesian Products	$\circ$ $n$ , $2^n$ , $n^2$
Answer Correct: Video: Counting - Cartesian Products  Submit   Answers are displayed within the problem  Answers are displayed within the problem  Answer Correct: Video: Counting - Cartesian Products  Answer Correct: Video: Counting - Cartesian Products  Submit	Answer Correct: Video: Counting - Cartesian Products  Submit   Answers are displayed within the problem  Answers are displayed within the problem  The point (graded)  For sets $P$ and $Q$ , the notation $P^Q$ represents:  The set of functions from $Q$ to $P$ The set of functions from $P$ to $Q$ The number of functions from $P$ to $Q$ The number of functions from $P$ to $Q$ Answer Correct: Video: Counting - Cartesian Products	$\bigcirc \ 2^n$ , $n$ , $n^2$
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Answers are displayed within the problem		Submit
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1/1 point (graded)

Let X be the set of 26 English letters. Then  $|\{(x,y): x,y\in X, x
eq y\!\!\!/|=$ 

- 26 × 25 

  ✓
- extstyle 26 imes26
- 026 + 26
- $\circ$  26 + 25

## **Answer**

Correct: Video: Counting - Mix It Up

Submit

**1** Answers are displayed within the problem

5

1/1 point (graded)

If  $G=\{0,2,4,6,8\}$ , then what is  $|G^4|$ ?

- $\bullet$   $5^4$
- $^{\circ}$   $4^{5}$
- $\ \, \circ \ \, 5\times 4\times 3\times 2\times 1$
- 0 + 2 + 4 + 6 + 8

**Answer** 

Correct: Video: Counting - Mix It Up

Submit

**1** Answers are displayed within the problem

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