Quiz 2 Review - on Notebook Paper

Are You Ready For Your Last Quiz In Honors Math II??

Some things to Know, Memorize, AND Understand how to use are…

What are the formulas?

$_nP_r =$ _____ $_nC_r =$ _____

Factorial:

For any integer n>0,

n! =n(n−1)(n−2)(n−3)…(3)(2)(1)

If n=0, 0! =__

Ex: 4! = ____

Fill in the notation ↓

Intersection of two sets **(A __ B)** :

_____

Fill in the vocab. ↑

Union of two sets **(A __ B)** :

_____

Complement of a set:

_____

P(not A) = **P(____) =** _____

If A and B are **Independent** events, then

P(A and B) = **P(A __ B) =** _____

If A and B are **Dependent** events, then

P(A, then B) = _____

If A and B are **Mutually Inclusive or Exclusive** Events

P(A or B) = **P(A __ B) =** _____

If A and B are **Conditional** Events

P(A given B) = **P(A __ B) =** _____

Quiz 2 Review KEY

Are You Ready For Your Last Quiz In Honors Math 2??

Some things to Know, Memorize, AND Understand how to use are…

$$ {}_nP_r = \frac{n!}{(n-r)!} \qquad {}_nC_r = \frac{n!}{(n-r)!\bullet r!} $$

Factorial:
For any integer n>0,
n! =n(n−1)(n−2)(n−3)…(3)(2)(1)
If n=0, 0! =1
Ex: $4! = 4 \cdot 3 \cdot 2 \cdot 1$

Intersection of two sets **(A ∩ B) :**
All the elements that appear **in both sets**
(the "overlap" of the two sets)

Union of two sets **(A ∪ B) :**
Everything **in either set**
(the items in A or B alone or both)

Compliment of a set**:**
all elements in the universal set
that are ***NOT*** in the initial set
P(not A) = **$P(A^C) = 1 - P(A)$**

If A and B are **Independent** events, then
P(A and B) = **$P(A \cap B) = P(A) \cdot P(B)$**
If A and B are **Dependent** events, then
P(A, then B) = **P(A) · P(B after A)**
****assume success on 1st draw****

If A and B are **Mutually Inclusive or Exclusive** Events
P(A or B) = **$P(A \cup B) = P(A) + P(B) - P(A \cap B)$**

If A and B are **Conditional** Events

P(A given B) = $$P(A|B) = \frac{P(\text{A and B})}{P(B)}$$