9/23/21, 10:57 AM Quiz: Midterm 1

Midterm 1

Started: Sep 23 at 10:56am

Quiz Instructions

Please answer all questions. Good luck!

NOTE: in some answers, the symbol ^ is used to indicate power. For example 2^ 3 =8.

Question 1 1 p	ots
Let	
m = "Juan is a math major,"	
c = "Juan is a computer science major,"	
g = "Juan's girlfriend is a literature major,"	
h = "Juan's girlfriend has read Hamlet," and	
t = "Juan's girlfriend has read The Tempest."	
Which of the following expresses the statement "Juan is a computer science major and a math major, but his girlfriend is a literature major who hasn't read both The Tempest and Hamlet."	
(in this problem [^] is and , [∨] is or , ~ is negation).	
○ c ^ m ^ g ^ (~h ∨ ~t)	
○ c ^ m ^ g ^ (~h ^ ~t)	
○ c^ m ^ (g ∨ (~h ∨ ~t))	
○ c ^ m ^ (g ∨ (~h ^ ~t))	
c ∧ m ∧ g ∧ (h ∨ t)	

Next ▶

9/23/21, 11:03 AM Quiz: Midterm 1

Midterm 1

Started: Sep 23 at 10:56am

Quiz Instructions

Please answer all questions. Good luck!

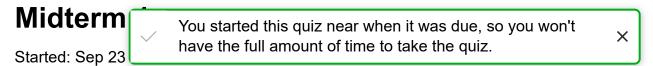
NOTE: in some answers, the symbol ^ is used to indicate power. For example 2^ 3 =8.

Question 2	1 pts
The function ((p \lor (r \lor q)) \land \sim (\sim q \land \sim r) is equal to the function	
○ ((p ∨ r) ∨ q)) ∧ (p ∨ r)	
\bigcirc (p \land r) \lor (p \land q)	
○ (p ∨ q) ∧ ~(p ∨ r)	
○ (p ∧ q) ∨ (p ∧ r)	
○ q v r	

Next ▶

No new data to save. Last checked at 11:02am

9/23/21, 11:03 AM Quiz: Midterm 1



Quiz Instructions

Please answer all questions. Good luck!

The Boolean function $[\sim(\sim p \land q) \land \sim(\sim p \land \sim q)] \lor (p \land r)$ is eq	ual to the Boolean func	tion
O p v q		
○ r		
○ q		
○ p		
○р∧r		
		Next ▶

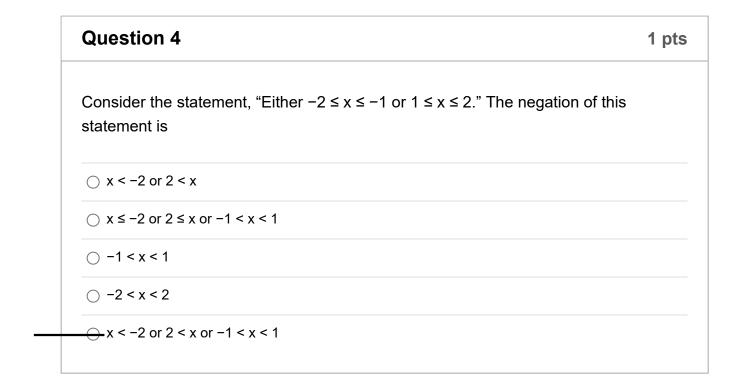
9/23/21, 11:11 AM Quiz: Midterm 1

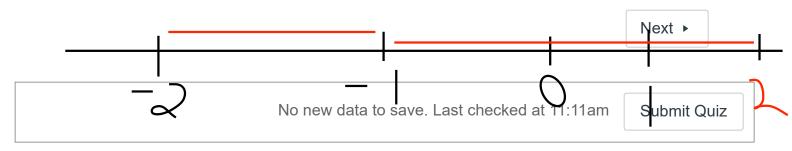
Midterm 1

Started: Sep 23 at 10:56am

Quiz Instructions

Please answer all questions. Good luck!





9/23/21, 11:14 AM Quiz: Midterm 1

Midterm 1

Started: Sep 23 at 10:56am

Quiz Instructions

Please answer all questions. Good luck!

NOTE: in some answers, the symbol ^ is used to indicate power. For example 2^ 3 =8.

Which of the following is a negation for "For any integer n , if n is composite, then n is even or $n > 2$." There exists an integer n such that n is composite and n is even and $n \le 2$. For any integer n , if n is composite, then n is not even or $n \le 2$. For any integer n , if n is not composite, then n is even and $n \le 2$. For any integer n , if n is not composite, then n is not even and $n \le 2$. There exists an integer n such that n is composite and n is not even and $n \le 2$. For any integer n , if n is not composite, then n is not even or $n \le 2$. There exists an integer n such that if n is not even or $n \le 2$. There exists an integer n such that if n is composite, then n is not even and $n \le 2$. For any integer n , if n is not composite, then n is not even and $n \le 2$.	Question 5	1 pts
 For any integer n, if n is composite, then n is not even or n ≤ 2. For any integer n, if n is not composite, then n is even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. There exists an integer n such that n is composite and n is not even and n ≤ 2. There exists an integer n such that if n is not composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even or n ≤ 2. There exists an integer n such that if n is composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. 		posite, then <i>n</i> is
 For any integer n, if n is not composite, then n is even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. There exists an integer n such that n is composite and n is not even and n ≤ 2. There exists an integer n such that if n is not composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even or n ≤ 2. There exists an integer n such that if n is composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. 	\bigcirc There exists an integer n such that n is composite and n is even and n \leq 2.	
 For any integer n, if n is not composite, then n is not even and n ≤ 2. There exists an integer n such that n is composite and n is not even and n ≤ 2. There exists an integer n such that if n is not composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even or n ≤ 2. There exists an integer n such that if n is composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. 	\bigcirc For any integer n, if n is composite, then n is not even or n \leq 2.	
 There exists an integer n such that n is composite and n is not even and n ≤ 2. There exists an integer n such that if n is not composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even or n ≤ 2. There exists an integer n such that if n is composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. 	\bigcirc For any integer n, if n is not composite, then n is even and n \leq 2.	
 There exists an integer n such that if n is not composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even or n ≤ 2. There exists an integer n such that if n is composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. 	\bigcirc For any integer n, if n is not composite, then n is not even and n \leq 2.	
 For any integer n, if n is not composite, then n is not even or n ≤ 2. There exists an integer n such that if n is composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. 	There exists an integer n such that n is composite and n is not even and n ≤	2.
 There exists an integer n such that if n is composite, then n is not even and n ≤ 2. For any integer n, if n is not composite, then n is not even and n ≤ 2. 	○ There exists an integer n such that if n is not composite, then n is not even a	and n ≤ 2.
○ For any integer n, if n is not composite, then n is not even and n ≤ 2.	○ For any integer n, if n is not composite, then n is not even or n ≤ 2.	
	○ There exists an integer n such that if n is composite, then n is not even and	n ≤ 2.
There exists an integer n such that if n is not composite, then n is not even or n ≤ 2.	\bigcirc For any integer n, if n is not composite, then n is not even and n \leq 2.	
	○ There exists an integer n such that if n is not composite, then n is not even of	or n ≤ 2.

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No new data to save. Last checked at 11:14am

9/23/21, 11:19 AM Quiz: Midterm 1

Midterm 1

Started: Sep 23 at 10:56am

Quiz Instructions

Please answer all questions. Good luck!

Question 6		1 pts
The product of any two irrational num	nbers is irrational.	
The statement is false.		
The statement is true.		
		Next ▶
		NEXI P
	Quiz saved at 11:18am	Submit

9/23/21, 11:29 AM Quiz: Midterm 1

Midterm 1

Started: Sep 23 at 10:56am

Quiz Instructions

Please answer all questions. Good luck!

NOTE: in some answers, the symbol ^ is used to indicate power. For example 2^ 3 =8.

Question 8	1 pts
The simplification of 7 ⁿ + 2•7 ⁿ⁻¹ + ••• + 2•7 ² +2•7+2 is	
7 ^ 2.5	
○ (4·(7^n)-1)/3	
○ (3·7^(n+1)-1)/2	
○ (2·7^(n+1)-1)/3	

Next ▶

Quiz saved at 11:29am

9/23/21, 11:33 AM Quiz: Midterm 1

Midterm

Started: Sep 23

You started this quiz near when it was due, so you won't have the full amount of time to take the quiz.

Quiz Instructions

Please answer all questions. Good luck!

C f is maith an ana ta ana		
f is neither one-to-one,f is only one-to-one fund		
○ f violets the function def	nition.	
○ f is only onto function.		
_ f is both one-to-one and	onto function.	
		Next

9/23/21, 11:37 AM Quiz: Midterm 1

Midterm

Started: Sep 23

You started this quiz near when it was due, so you won't have the full amount of time to take the quiz.

Quiz Instructions

Please answer all questions. Good luck!

Let S be the set of all strings of 0's and 1's of leng follows: for all strings s and t in S,	th 3. Define a relation <i>R</i> on	S as
s R $t \Leftrightarrow$ the two leftmost characters of s are the characters of t .	same as the two leftmost	
○ R is not an equivalence relation.		
○ R is only transitive.		
○ R is only reflexive.		
○ R is only symmetric.		
R is an equivalent relation.		
		Next ▶
	Not saved	Submit

9/23/21, 11:41 AM Quiz: Midterm 1

Midterm

Started: Sep 23

You started this quiz near when it was due, so you won't have the full amount of time to take the quiz.

Not saved

Quiz Instructions

Please answer all questions. Good luck!

NOTE: in some answers, the symbol ^ is used to indicate power. For example 2^ 3 =8.

Question 11	1 pts
A teacher offers ten possible assignments for extra credit in a control of the co	nments involve library ose that a student out replacement. What
○ 33.7%	
○ 33.7%○ 13.3%	

9/23/21, 11:44 AM Quiz: Midterm 1

Midterm

Started: Sep 23

You started this quiz near when it was due, so you won't have the full amount of time to take the quiz.

×

Quiz Instructions

Please answer all questions. Good luck!

Question 12		1 pts
A screening test for a certain disease is used in a large popular 1 in 1000 actually has the disease. Suppose that the false postalse-negative rate is 0.5%. Thus a person who has the disease 99.5% of the time, and a person who does not have the disease 99% of the time. What is the probability that a randomly chose positive for the disease actually has the disease?	sitive rate is 1% se tests positive se tests positive se tests negations.	% and the re for it ive for it
○ 6.5%		
O 2.8%		
O.005%		
O 9%		
		Next ▶

9/23/21, 11:48 AM Quiz: Midterm 1



Started: Sep 23

You started this quiz near when it was due, so you won't have the full amount of time to take the quiz.



Quiz Instructions

Please answer all questions. Good luck!

Question 13		1 pts
A certain connected graph has 68 vertices and 72 edges.		
○ The graph cannot have more edges than vertices.		
○ The graph is a tree.		
○ The graph is a tree with some vertices having loops.		
○ The graph has a circuit		
		Next ▶
		INEXT >
	Not saved	Submit

9/23/21, 11:48 AM Quiz: Midterm 1

Midterm

Started: Sep 23

You started this quiz near when it was due, so you won't have the full amount of time to take the quiz.

Quiz Instructions

Please answer all questions. Good luck!

Question 14		1 pts
Suppose that a fair coin is tossed ten times.		
(a) How many ways can at least eight heads be obtaine	ed?	
(b) What is the probability of obtaining at least eight hea	ads?	
○ 8 and 4.5%		
○ 56 and 5.5%		
○ 27 and 2.6%		
○ 27 and 2.7%		
		Next ▶
	Not saved	Submit (

9/23/21, 11:52 AM Quiz: Midterm 1

Midterm 1

Started: Sep 23 at 10:56am

Quiz Instructions

Please answer all questions. Good luck!

NOTE: in some answers, the symbol ^ is used to indicate power. For example 2^ 3 =8.

Question 15			1 pts	
Use iteration to find an explicit formula for the following recursively defined sequence.				
C ₁ = 1 and	$C_k = 3C_{k-1} + 1$	for k≥2		
○ (2^n +1)/3				
○ (3n + 3)/6				
○ n^5				
○ (3^n - 1) /2				

Next ▶

Quiz saved at 11:52am

9/23/21, 11:55 AM Quiz: Midterm 1

Midterm 1

Started: Sep 23 at 10:56am

Quiz Instructions

Please answer all questions. Good luck!

NOTE: in some answers, the symbol ^ is used to indicate power. For example 2^ 3 =8.

Determine which pairs of statements are equivalent. 1. If Proposition 111 passes, freeways are improved. 2. If Proposition 111 is defeated, freeways are not improved. 3. If the freeways are improved, Proposition 111 passes. 4. If the freeways are not improved, Proposition 111 does not pass. 2 and 4 2 and 3 1 and 4 1 and 3	Question 16	1 pts	
 If Proposition 111 passes, freeways are improved. If Proposition 111 is defeated, freeways are not improved. If the freeways are improved, Proposition 111 passes. If the freeways are not improved, Proposition 111 does not pass. 2 and 4 2 and 3 1 and 4 			
 2. If Proposition 111 is defeated, freeways are not improved. 3. If the freeways are improved, Proposition 111 passes. 4. If the freeways are not improved, Proposition 111 does not pass. 2 and 4 2 and 3 1 and 4 	Determine which pairs of statements are equivalent.		
3. If the freeways are improved, Proposition 111 passes. 4. If the freeways are not improved, Proposition 111 does not pass. 2 and 4 2 and 3 1 and 4	1. If Proposition 111 passes, freeways are improved.		
4. If the freeways are not improved, Proposition 111 does not pass. O 2 and 4 O 2 and 3 O 1 and 4	2. If Proposition 111 is defeated, freeways are not improved.		
2 and 42 and 31 and 4	3. If the freeways are improved, Proposition 111 passes.		
○ 2 and 3○ 1 and 4	4. If the freeways are not improved, Proposition 111 does not pass.		
○ 1 and 4	○ 2 and 4		
	○ 2 and 3		
○ 1 and 3	○ 1 and 4		
	○ 1 and 3		

No new data to save. Last checked at 11:55am

Submit Quiz

Next ▶

9/23/21, 12:04 PM Quiz: Midterm 1

Midterm 1

Started: Sep 23 at 10:56am

Quiz Instructions

Please answer all questions. Good luck!

NOTE: in some answers, the symbol ^ is used to indicate power. For example 2^ 3 =8.

1 pts

Quiz saved at 12:04pm