Math 34A Winter 2020			PERM NUMBER
Quiz #5b	PRINT NAME TIM	Lee	6674708
No calculators  Put your answer in the		A: 🔀 Trevor 🔲 Sa ☐ Garo	m <b>Time:</b>
The re	ate at which Andi burns ca be her pace, in minutes per	lories depends on th	ne pace of her run – a faster pace ne rate at which she burns calories
(a) What are the units of $f'(x)$ ?	)		minutes permite
	miles per minut	<u> </u>	
f(x) = (alonie) $f(x) = slope$	perhant 7  f(x):		
	change		
	for every increas	e miles que mi	inte increase cally
(b) If $f(x) = 300/x$ , what is the		etween $x = 10$ and $x$	x = 15?
10-15-5	<b>3</b> 0	0 - 16	<del>2</del> = 2
	300/x	y = fly	<b>ь</b>
	300/10=30		
	300/15 = 20		

Math	34A	Winter	2020
Quiz =	#5b		

Inliana	Mario	Ve	Lem
PRINT			

PERM NUMBER	
8989048	

No calculators

Put	your	answer	in	the
1 40	Jour	CILLED III CL		

5	ΟX	
1-0-		

provided.

TA:	Trevor
	Caro

Sam	
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Time: 8am

6pm
7pm

- 1. And is out for a run. The rate at which Andi burns calories depends on the pace of her run a faster pace burns calories quicker. Let x be her pace, in minutes per mile, and f(x) be the rate at which she burns calories (in calories per hour) at pace x.
- (a) What are the units of f'(x)?

Calarics/minute

(b) If f(x) = 300/x, what is the average rate of change between x = 10 and x = 15?

$$\frac{90-20}{10-16} = -\frac{10}{6} = -2$$

Math	34A	Winter	2020
Quiz	#5b		

Elizabeth Salcido PRINT NAME

PERM NUMBER	
8302028	

No calculators

Put your answer in the

box

provided.

TA: Trevor

Sam

Time: 8am

6pm 7pm

- 1. And is out for a run. The rate at which Andi burns calories depends on the pace of her run a faster pace burns calories quicker. Let x be her pace, in minutes per mile, and  $\underline{f(x)}$  be the rate at which she burns calories (in calories per hour) at pace x.
- (a) What are the units of f'(x)?

minutes per mile

(b) If 
$$f(x) = 300/x$$
, what is the average rate of change between  $x = 10$  and  $x = 15$ ?

$$\frac{df}{d} = \frac{20 - 30}{16 - 10} = \frac{-10}{5} = -2$$

 $f(16) = \frac{300}{15} = 20$   $f(10) = \frac{300}{10} = 30$ 

Math	34A	Winter	2020
Quiz :	#5b		

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	PE	ER	M	M	JM	BE	R	
32		0	Ö	0	0			

No calculators

Put your answer in the

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7	$\cap Y$
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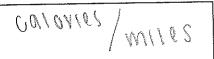
provided.

TA:	\(\sqrt{Trevor}\)
	☐ Garo

 $\square$  Sam

Time:	⊠8am
	F-

- 1. And is out for a run. The rate at which Andi burns calories depends on the pace of her run a faster pace burns calories quicker. Let x be her pace, in minutes per mile, and f(x) be the rate at which she burns calories (in calories per hour) at pace x.
- (a) What are the units of f'(x)?



 $\frac{dx}{df(x)} = \frac{coulmile}{minle}$ 

(b) If f(x) = 300/x, what is the average rate of change between x = 10 and x = 15?



$$f'(x) = \frac{300}{x^2}$$

Math 34A Winter 2020 Quiz #5b	YUJANY SO PRINT NAME	irabia	PERM NUMBER 9412354	
No calculators	PRINT NAME			
Put your answer in the	DOX provided.	TA: Trevor Garo	Sam       Time:	
Andi is out for a run burns calories quicker (in calories per hour)	. Let $x$ be her pace, in minutes	s calories depends oper mile, and $f(x)$ b	on the pace of her run – a faster pace be the rate at which she burns calories	
(a) What are the units	of $f'(x)$ ?		miles per hr	
	x = min pe	r mile	f(x)= cal per hr	
	('(X) = -	miles	er V) v	
		·		
f(a)-f(b)	nat is the average rate of chang	3()	and $x = 15$ ? $ -\frac{5}{1} $	
( 300	$\frac{366}{5-10}$	= 10 5		je je

Math 34A	Winter	2020
Quiz #5b		

Sarahi Perez-Aguilar PRINT NAME

F	PER	M	NU	M	<u> 3EI</u>	₹	
16	94	64	1-7	,			

No calculators

Put your answer in the

provided.

TA:	X	Trevor
		Garo

☐ Sam

Time:	X	8am
		5pm

∫6pm  $7 \mathrm{pm}$ 

- 1. Andi is out for a run. The rate at which Andi burns calories depends on the pace of her run a faster pace burns calories quicker. Let x be her pace, in minutes per mile, and f(x) be the rate at which she burns calories (in calories per hour) at pace x.
- (a) What are the units of f'(x)?

Liminutes per mile f(x); culovies per hor

(b) If f(x) = 300/x, what is the average rate of change between x = 10 and x = 15?

 $\frac{1}{4} = \frac{5}{10} = 1.5$ 

X=16 - X-15



$$f(x) = \frac{300}{x}$$

Math 34A Winter 2020 Quiz #5b  No calculators  Put your answer in the	Aubree Ka PRINT NAME box provided.		PERM NUMBER  7964547  Sam Time: 8am 6pm 5pm 7pm
burns calories quicker (in calories per hour)  (a) What are the units	Let $x$ be her pace, in minut at pace $x$ .  of $f'(x)$ ?	rns calories depends on es per mile, and $f(x)$ be	the pace of her run – a faster pace the rate at which she burns calories $f(X)/X$
	ovies per how invites per mile  //m  //mile		
E(X)			
(b) If $f(x) = 300/x$ , w $\frac{300}{10} = 30$	hat is the average rate of cha	nge between $x = 10$ and	$1x = 15? \qquad 10 \text{ kcal/m}$

300 = 20 15

Math 34A Winter 2020 Quiz #5b	Fabiola Ixtan PRINT NAME	Moteo		PERM NUN 949112 7	1BER
No calculators  Put your answer in the	DX provided.	TA: X Trevor	Sam	Time: 🔏 8am	☐ 6pm ☐ 7pm
1. And is out for a run. The run burns calories quicker. Let $x$ (in calories per hour) at pace	ate at which Andi bur be her pace, in minute	ns calories depends s per mile, and $f(x)$	on the pace	e of her run — a : e at which she bu	faster pace ens calories
(a) What are the units of $f'(x)$	?		Calonies	she bans pe	w Wite
Calonies she burns	per mile				
(b) If $f(x) = 300/x$ , what is the second s	ne average rate of char	nge between $x = 10$	and $x = 15$	? 10	
101300	36				
$f(x) = \frac{300}{x}$ $f'(x) = 300 \cdot x^{-1}$					
z -IX		2			
=-1(16 <sup>2</sup> )-1(	15-2)	75			
= -100	125	225	***************************************		

Math 34A Winter 2020 Quiz #5b	Maile Bu	ckman	PERM NUMBER 6848311		
No calculators	PRINT NAME				
Put your answer in the	DX provided.	TA: Trevor [	Sam Time	8am	
<ol> <li>Andi is out for a run. The rather than the part of th</li></ol>	be her pace, in minut	rns calories depends es per mile, and $f(x)$	be the rate at will	CH SHE DIVING COLORIO	
(a) What are the units of $f'(x)$ ?	?		change in co	alonies per hour per minute	
f(x) = <del>Change</del>	rate of c	alonie burn e	⇒ derivativ	e of <u>calonies</u> but pace	
f'(x) = chain	nge in rate o	of calorie bur	<u>n</u> _		
$\frac{\Delta \text{ calonies}}{\Delta \text{ hows}} \cdot \frac{m}{m}$	change in g	alonies A co	nories hour minutes miles		
(b) If $f(x) = 300/x$ , what is the $f(x) = 300 \times 7$ f'(x) = (-1)(3) = -3	00)(x <sup>-2</sup> )	nge between $x = 10$ a $\frac{300}{10} = 30$	$\frac{300}{15} = 20$	vg. rate of ange=-2 [secant line]	
$= \frac{-3}{x}$	(2	y2-y1=m( 30-20=m 10=-8	(10-15)		

-2=m

Math 34A Winter 2020	Alteral	Talentino		PERM NUM	IBER -
Quiz #5b	PRINT NAME	Tolentino		9709945	
No calculators  Put your answer in the	provided.	TA: X Trevor	Sam	Time: 🛛 8am	
rut your answer in the	DOX provided.				
1. Andi is out for a run. To burns calories quicker. Le (in calories per hour) at	et $x$ be her pace, in min	burns calories depend utes per mile, and $f(x)$	$\frac{1}{x}$ be the ra	ace of her run — a f te at which she bur	aster pace ns calories
(a) What are the units of $f$			oa	lories/mile	
X = pace (min/m	(1-6)	/	<u> </u>		
X = pace (min) $f(x) = rate of base$	rning culorits	(calorical honr	)		
calones	min	•			
N & N. K.	calonel				-
min					
mile					
•					

(b) If 
$$f(x) = 300/x$$
, what is the average rate of change between  $x = 10$  and  $x = 15$ ?

$$f(x) : 300/x$$

$$f(15) : 300/15 : 20$$

$$f(10) : 300/10 : 30$$

$$f(10) : \frac{300}{5} = \frac{20 - 30}{5} = \frac{-10}{5} : -2$$

Math 34A Winter 2020				PERM NUMBER	
Quiz #5b	PRINT NAME	Mya Watts	ļ	7481401	
No calculators		TA: Trevor	— ☐ Sam	Time: 8am	6pm
Put your answer in the	DOX provided.	Garo		5pm	7pm
				_	

- 1. And is out for a run. The rate at which Andi burns calories depends on the pace of her run a faster pace burns calories quicker. Let x be her pace, in minutes per mile, and f(x) be the rate at which she burns calories (in calories per hour) at pace x.
- (a) What are the units of f'(x)?  $X = \min S$  per mile f(x) = calovies burned per hy

(b) If 
$$f(x) = 300/x$$
, what is the average rate of change between  $x = 10$  and  $x = 15$ ?

$$f(x) = 300/x$$

$$\frac{300 \div 5}{15 - 5} = \frac{100 \div 5}{3 \times 3} = 20$$

$$\frac{300}{15} - \frac{300}{10}$$

$$\frac{300}{15} = \frac{300}{10} = \frac{-10}{5} = -2$$

$$\frac{300 \div 6}{15 - 10} = \frac{30}{5} = -2$$