Math 34A Winter 2020
Quiz #5a

No calculators

PRINT NAME

PERM NUMBER

Put your answer in the box provided.

TA: ☐ Garo ☐ Trevor ☐ Sam

Time: ☐ 8am ☐ 6pm ☐ 5pm ☐ 7pm

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1. Andy is out for a run. The rate at which Andy burns calories depends on the pace of his run – a faster pace burns calories quicker. Let x be his pace, in minutes per kilometer, and $f(x)$ be the rate at which he burns calories (in calories per hour) at pace x.

(a) What are the units of $f'(x)$?

(b) If $f(x) = 240/x$, what is the average rate of change between $x = 8$ and $x = 10$?

Version A

Math 34A Winter 2020
Quiz #5b

PRINT NAME

PERM NUMBER

No calculators

Put your answer in the box provided.

TA: ☐ Trevor ☐ Sam ☐ Garo

Time: ☐ 8am ☐ 5pm ☐ 6pm ☐ 7pm

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 $f'(x)$?

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

Version B